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**ENTREPRENEURIAL STRATEGY, RESOURCES ACQUISITION AND  
NASCENT VENTURE PERFORMANCE IN MALAYSIA**

**RUSNIFAEZAH MUSA**



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**THE MODERATING EFFECT OF RESOURCE ACQUISITION ON THE  
RELATIONSHIP BETWEEN ENTREPRENEURIAL STRATEGY AND  
PERFORMANCE OF MALAY-OWNED NASCENT VENTURE IN  
MALAYSIA**

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## ABSTRACT

The stage of emergence is found to be most crucial stage in entrepreneurship studies. The Harvard Business School research shows that 75 percent of all start-ups fail, while in Malaysia, researchers found out the rate of failure among the bumiputera, where the majority are Malay entrepreneurs, is the highest. This study aimed to investigate the nature of relationship that exists between entrepreneurial orientation, entrepreneurial bricolage and nascent venture performance in Malaysia. Furthermore, this study intended to examine the moderating effects of resources acquisition (government assistance programs and online social networking adoption) on the relationship between entrepreneurial strategies and nascent venture performance. This study employed the quantitative approach of research and the survey method was used to conduct the study on 184 Malay-owned nascent ventures in Malaysia. The data was analysed with the SPSS v.20 statistical technique. The correlation analysis indicated that all the factors have a significant positive effect on nascent venture performance. The regression analysis further revealed that entrepreneurial bricolage and proactiveness significantly influence nascent venture performance while innovativeness and risk taking of entrepreneurial orientation are not significant to nascent venture performance. The hierarchical regression analysis was utilized to examine the moderating effect. Meanwhile, government assistance programs only have moderating effects on the relationship between proactiveness and performance of nascent venture in Malaysia. These findings have demonstrated why new businesses cannot survive until the maturity stage of business development. This study justifies that the engagement between academicians, ministries, the government and the entrepreneurs in developing a new business model for nascent ventures is necessary. Using configuration theory, future research can extend the nascent venture performance context by examining the holistic aspects, consisted of; characteristics of the entrepreneurs, resources of the nascent entrepreneurs, environment, and organizing activities (management).

**Keywords:** Entrepreneurial bricolage, entrepreneurial orientation, government assistance program, online social network, nascent ventures performance.

## ABSTRAK

Fasa awal kemunculan perniagaan merupakan peringkat yang paling penting dalam penyelidikan bidang keusahawanan. Penyelidikan Sekolah Perniagaan Harvard menunjukkan bahawa 75 peratus daripada perusahaan baharu didapati gagal, sementara di Malaysia, para penyelidik mendapati kadar kegagalan perusahaan bumiputera yang majoritinya di kalangan usahawan Melayu adalah yang tertinggi. Kajian ini bertujuan untuk mengkaji hubungan yang wujud di antara orientasi keusahawanan, keusahawanan brikolaj dan prestasi perusahaan baru tumbuh di Malaysia. Tambahan lagi, kajian ini bertujuan untuk mengkaji kesan penyederhana pengambilalihan sumber (program bantuan kerajaan dan penggunaan rangkaian sosial dalam talian) terhadap strategi keusahawanan dan prestasi perusahaan baru tumbuh. Di samping itu, kajian ini menggunakan pendekatan kuantitatif dan kaedah kaji selidik telah dijalankan ke atas 184 perusahaan milik orang Melayu di Malaysia. Data dianalisis menggunakan teknik statistik SPSS versi 20. Dapatan analisis korelasi menunjukkan bahawa semua faktor mempunyai hubungan yang positif dan signifikan ke atas prestasi perusahaan baru tumbuh. Selanjutnya, analisis regresi mendedahkan bahawa keusahawanan brikolaj dan daya proaktif secara signifikan mempengaruhi prestasi perusahaan baru tumbuh sementara inovasi dan pengambilan risiko orientasi keusahawanan tidak mempunyai hubungan yang signifikan dengan perusahaan baru tumbuh. Analisis regresi hierarki telah digunakan untuk mengkaji kesan penyederhana terhadap pemboleh ubah. Sementara itu, program bantuan kerajaan hanya memberikan kesan penyederhana terhadap hubungan di antara daya proaktif dan prestasi perusahaan baru tumbuh di Malaysia. Dapatan kajian telah membuktikan mengapa perusahaan baru tumbuh tidak mampu bertahan sehingga tahap kematangan pembangunan perniagaan. Kajian ini turut membuktikan bahawa keterlibatan di antara ahli akademik, kementerian, kerajaan dan usahawan dalam membangunkan model perniagaan baharu untuk perusahaan baru tumbuh masih diperlukan. Menggunakan teori konfigurasi, penyelidikan masa depan boleh memanjangkan konteks prestasi usaha yang baru muncul dengan mengkaji setiap aspek secara holistik, terdiri daripada; ciri usahawan, sumber usahawan untuk perusahaan baru tumbuh, persekitaran, dan aktiviti (pengurusan).

**KataKunci:** Keusahawanan brikolaj, orientasi keusahawanan, program bantuan kerajaan, jaringan sosial dalam talian, prestasi perusahaan baru tumbuh.



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*“The roots of education are bitter, but the fruit is sweet”*

Aristotle

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January 2019

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## List of Abbreviations

| <b>Abbreviation</b> | <b>Descriptions of Abbreviation</b>                              |
|---------------------|--|
| 1MeT                | 1 Malaysian Entrepreneurs  |
| ACCCIM              | Associated Chinese Chambers of Commerce and Industry of Malaysia |
| ADB                 | Asean Development Bank   |
| AGFI                | Adjusted goodness of fit index                                   |
| AMOS                | Analysis of Moments Structure                                    |
| ANOVA               | Analysis of Variance   |
| CCM                 | Companies Commission of Malaysia                                 |
| CFA                 | Confirmatory Factor Analysis                                     |
| CFI                 | Comparative fit index  |
| e-CBID              | e- Corporate and Business Information Data                       |
| EFA                 | Exploratory Factor Analysis                                      |
| EO                  | Entrepreneurial orientation                                      |
| ETP                 | Economic transformation program                                  |
| GAP                 | Government assistance program                                    |
| GDP                 | Gross Domestic Product   |
| GEF                 | Graduate entrepreneurship fund                                   |
| GEM                 | Global Entrepreneurship Monitor                                  |
| GFI                 | Goodness of fit index  |
| GNI                 | Gross National Income  |
| HSBB                | High Speed Broadband   |
| IMP                 | Industrial master plan   |
| INSKEN              | Institut Keusahawanan Negara                                     |
| IPPBM               | Institut Penyelidikan Pembangunan Belia Malaysia                 |
| IT                  | Information Technology   |
| MaGic               | Malaysian Global Innovation and Creativity Centre                |
| MARA                | Majlis Amanah Rakyat   |
| MCMC                | Malaysian Communications and Multimedia Commission               |
| METP                | Malaysian Economic Transformation Program                        |

|               |   |
|---------------|---|
| MITI          | Ministry of International Trade and Industry        |
| MOSTI         | Ministry of Science, Technology and Innovation      |
| NBI           | National Broadband Initiative                       |
| NEP           | New economic policy                                 |
| NGO           | Non-Government Organization                         |
| NSDC          | National SME Development Council                    |
| OLC           | Organization life-cycle                             |
| OSMEP         | Office of Small Medium Enterprises Promotion        |
| PPP           | Public Private Partnership                          |
| PUNB          | Perbadanan Usahawan Nasional Berhad                 |
| RBV           | Resource based view                                 |
| RMSEA         | Root mean square error of approximation             |
| ROA           | Return of assets                                    |
| ROB           | Registration of business                            |
| ROC           | Registration of companies                           |
| ROE           | Return on equity                                    |
| ROI           | Return of investment                                |
| SEM           | Structural equation modeling                        |
| SME           | Small-medium enterprises                            |
| SMEs          | Small-Medium Enterprises                            |
| SNWs          | Social networking websites                          |
| SPSS          | Statistical Package for Social Science              |
| TAM           | Technology acceptance model                         |
| TEA           | Total Entrepreneurial Activity                      |
| TLI           | Tucker-Lewis index                                  |
| TM            | Telekom Malaysia Berhad                             |
| TRA           | Theory reasoned action                              |
| UKM           | Universiti Kebangsaan Malaysia                      |
| UPM           | Universiti Pertanian Malaysia                       |
| USD           | United State Dollar                                 |
| UTAUT         | Unified theory of acceptance and used of technology |
| UUM           | Universiti Utara Malaysia                           |
| WWW           | World Wide Web                                      |
| $\chi^2 / df$ | Normed chi square                                   |



# **CHAPTER 1**

## **INTRODUCTION**

In the entrepreneurship study, the organization life cycle theory has been widely used by the researchers to provide an understanding on the development of the business venture. Most entrepreneurship scholars agreed on the three stage of organizational life cycle which are emergence, adolescence and post adolescence in the entrepreneurship research (Churchill & Lewis, 1983; Kazanjian & Drazin, 1990; Lester, Parnell, & Carraher, 2003; Scott & Bruce, 1987) while recent study by Duobiene (2013) agreed with established, grow-up and decline stage to represent the stage of organizational life cycle.

The early stage; the stage of emergence is found to be most crucial stage for new entrepreneurs. In this stage, the review of nascent, new or start-up studies remains to be a focal point in entrepreneurship studies. Nascent entrepreneurship research exposed it uniqueness of the study where the discipline of the studies is still at the early stage (Saade, 2013; Hayek, 2012; Parker & Belghitar, 2006) but has received much attention in recent years. This area of study is crucial when there is no consensus in definition of nascent, new or start-up ventures and other few issues related which will discussed further in the next chapter. While for entrepreneurs, in the emergence stage, there is a need of study to determine the best strategy to develop their business to the maturity stage and combating the scarce of resources.

The ventures in the emerging stage continuously facing substantial resource constraints (Shepherd et al., 2000). Although the availability of various government supports help entrepreneurs to overcome the resource constraint, yet it is not sufficient to capital the ventures to success. In the Bumiputera entrepreneurs congress held in MATRADE (Malaysian External Trade Development Corporation) on 29<sup>th</sup> March 2014 discussed the issues and challenges of new entrepreneurs in Malaysia.

Among the challenges are insufficient accesses to funding, labor shortage, underutilization of information technology, lack of branding awareness and access to domestic and international markets. From the congress, seven action plans were proposed in lessen the challenges of new entrepreneurs (Utusan Online, 2014). Although the government supports aiding entrepreneurs in capital funding to their business, Datuk Seri Abdullah Ahmad Badawi urges Bumiputera entrepreneurs not too depend on the government support but be more innovative in using the available resources (Utusan Online, 2004). This indicates that entrepreneurs of nascent venture not only need to be innovative, also to act entrepreneurially by changing the problems to opportunities and making something from nothing to overcome financial challenges in venturing the business.

Nascent ventures exist when a nascent entrepreneur in the process of establishing a business venture (Reynolds and White, 1997). The concept of nascent venture can be understood by the process of establishment where it starts from the business ideas to the realization of business ideas to the existent of business (3 months) and was acknowledged as a new venture when the venturing process takes place after 3 months to 42 months without any disruption of discontinuity event (Xavier, et al., 2010). While

nascent venture performance is defined as an ability of business to grow profitably in 5 years of its establishment (Dzathor, et al., 2013). Hence, nascent venture is identified as a business venturing by nascent and new entrepreneurs starting from the business idea realization and emerges not more than 5 years of its establishments, to represent their period of emerging stage in entrepreneurial process.

## **1.1 Background of Study**

Entrepreneurship was, for a long time, measured quantitatively typically through the rate of self-employment or the number of nascent ventures created (Ács & Szerb, 2010). Indeed, the creation of nascent venture contributes to the economic growth of a country (Ahlstrom, 2010; Wong, Ho & Autio, 2005; Wennekers & Thurik, 1999; Crosby, 2000; Sarasvathy, 2001). Acs and Szerb (2007) highlighted in their study there is a positive effect of entrepreneurial activity on economic growth in the highly develop countries while the negative effect is found on the relationship entrepreneurial activity and economic growth in the developing country. Based on the Table 1.1 below, Thailand showed the best example of negative relationship mentioned by Acs and Szerb (2007); when the TEA rate is high at 17.7, the contribution to GDP per capita is relatively low at \$ 5,678 billion compared to three other countries in the developing stage. Malaysia is ranked as the most ease in doing business and the start-up business rate also shows promising figure (refer Table 1.1). This is proved by the TEA rate and business density rate. Lowrey (2005) defined business density as the number of business firms per 1,000 persons. However, the creation of nascent ventures in Malaysia do not contributed to extensive gross of economic growth and employment compared to Turkey and Poland.

Table 1.1

The comparison of entrepreneurship ranking, rate, the GNI and the GDP across countries based on their economic development phase

| Economic Development Phase  | Country      | Ranking        |                   |                    |        | Rate   |                           |                      |            | (US \$ Billions) |                |
|-----------------------------|--------------|----------------|-------------------|--------------------|--------|--------|---------------------------|----------------------|------------|------------------|----------------|
|                             |              | Doing Business | Starting business | Closing business** | GEDI   | TEA    | Discontinuity of business | New business density | Employment | GNI              | GDP per capita |
| YEAR (current report)       |              | (2014)         | (2013)*           | (2013)             | (2005) | (2014) | (2013)                    | (2013)               | (2012)     | (2013)           | (2012)         |
| Factor-driven economies     | Algeria      | 153            | 151               | 164                | Nil    | 86     | 4.9                       | 3.3                  | 0.53       | 9.8              | 4,110          |
|                             | Philippines  | 108            | 133               | 170                | 132    | 90     | 18.5                      | 12.3                 | 0.27       | 7.3              | 2,470          |
| Efficiency-driven economies | Malaysia     | 6              | 8                 | 16                 | 43     | 45     | 6.6                       | 1.5                  | 2.28       | 3.2              | 9,800          |
|                             | Turkey       | 69             | 72                | 93                 | 125    | 40     | nil                       | nil                  | 0.79       | 9.9              | 10,609         |
|                             | Thailand     | 18             | 18                | 91                 | 37     | 65     | 17.7                      | 3.5                  | 0.86       | 0.8              | 5210           |
|                             | Poland       | 45             | 48                | 116                | 23     | 27     | 9.3                       | 4                    | 0.53***    | 10.4             | 12,670         |
| Innovation-driven economies | Japan        | 27             | 23                | 120                | 1      | 36     | 3.7                       | 1.5                  | 0.12       | 4.1              | 47,870         |
|                             | United State | 4              | 4                 | 20                 | 17     | 1      | 12.7                      | 3.8                  | Nil        | 7.5              | 50,120         |

Notes. 2013\* is used to indicate the comparison of doing business ranking while for closing business ranking, the current data only available at the year of 2005\*\* and was adapted from NationMaster (2014) website. Ranking for doing business, starting business, new business density and GNI was adapted from Doing Business (2014) meanwhile the rate of new business density for Poland, the data only available for the year 2009 \*\*\* as the current report. GEDI ranking was adapted from GEDI (2014), TEA rate and discontinuity of business was adapted from the GEM report by Bosma & Amoros (2013), and GDP per capita was adapted from Schwab (2013).

Although the result of discontinue rate showed that Malaysian entrepreneurs have low rate in discontinue of business, but the closing business rank by NationMaster (2014) proved that the higher number, ranked 43 over 155 countries signifies there were high number of business failure. This evidence also leads to the need of study at nascent ventures context as in this emerging stage, the high number of nascent venture creation contributes to high growth of economy in one's country.

In addition, recent study by Haltiwanger, Jarmin, and Miranda (2013) found that, most of the nascent ventures at the emerging stage contribute substantially to the job creation. Previous studies also agreed that the creation of nascent ventures contributes to GDP growth (Davidsson, 2003; Stel, Carrie & Thurik, 2005; Wagner, 2007). They further explained that the venture's age and net growth have weak relationship when exclude starts-up while in the survival perspectives, nascent and new ventures contribute to the higher growth of employment. This study envisaged the significance of starts-up ventures plays a significant role towards Malaysia economy (Hilmi & Ramayah, 2008; Hashim & Hassan, 2008; Murjan, 2012) and their development also crucial in creating economic resilience and national growth (Shinozaki, 2012). The statistical figure of SMEs growth in Malaysia postulate a decreasing rate in 2011 to 2012 and slightly grew in 2013 at 0.3 percent as showed in Table 1.2 below.

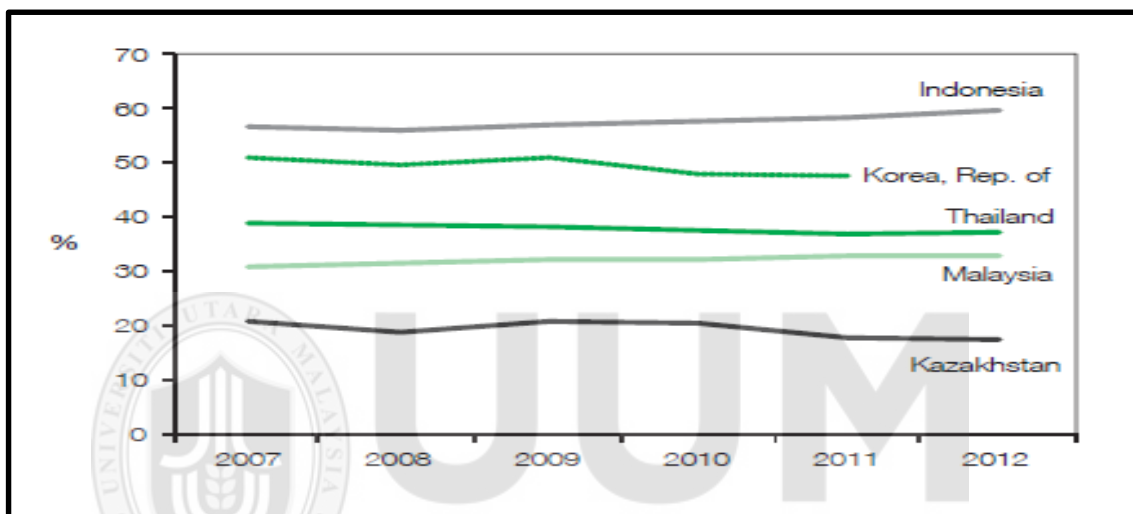
Table 1.2  
Country comparison of SME contribution to GDP and SME growth from 2009-2013

|          | SME Contribution to GDP |      |      |      |      | SME Growth |      |      |      |      |
|----------|-------------------------|------|------|------|------|------------|------|------|------|------|
|          | 2009                    | 2010 | 2011 | 2012 | 2013 | 2009       | 2010 | 2011 | 2012 | 2013 |
| Malaysia | 31.7                    | 32.0 | 32.5 | 32.7 | 33.1 | -0.4       | 8.3  | 7.1  | 6.0  | 6.3  |
| Thailand | 37.8                    | 37.1 | 36.6 | 37.0 | NA   | -0.2       | 8.0  | 1.0  | 7.0  | 3.3  |

*Note.* SME contribution to GDP and SME growth data for Malaysia were adapted from "SME Developments and Outlook" by NSDC, 2013, *SME Annual Report*, p.20-21

while for Thailand, data on SME contribution to GDP and SME growth were adapted from “Situation and Economic Indicators of SMEs in 2011 and 2012” by OSMEP, 2012, *White Paper on Small and Medium Enterprises of Thailand in 2011 Trends of 2012*, p.4.

It is reported that Malaysia experiencing an increasing rate in SME growth (SME Annual Report, 2013), however the percentage of SME contribution to GDP is smaller compared to other countries as showed in Figure 1.1.



*Figure 1.1. SME Contribution to GDP. Adapted from “Emerging Trends in SME Finance and Policies” by ADB, 2014, ADB–OECD Study on Enhancing Financial Accessibility for SMEs: Lessons from Recent Crises, p. 4. Copyright 2014 by Asian Development Bank.*

Surprisingly, although Thailand experiencing negative effect of entrepreneurial activity on economic growth, Thailand SMEs contribution to GDP yielded better rate compared to Malaysia SMEs contribution to GDP. Smaller contribution of entrepreneurship activities to GDP indicates most of the nascent and new ventures in Malaysia have poor performance.

## 1.2 Problem Statement

The highlight of business failure by previous researchers (Nordin, Hamid & Woon, 2011; Chong, 2012; Husin & Ibrahim, 2013; Rahman, Yaacob & Radzi, 2016) and the empirical data gathered for the study as showed in Table 1.1 in previous discussion indicates that there is a need of study on the nascent venture performance. Harvard Business School research shows that 75percent of all start-ups fail (Blank, 2013). According to Isenberg (2011) it is misguided to embrace failure to encourage entrepreneurship. Instead failure should be accepted as a natural part of doing business (Isenberg, 2011). A study done by Jamak, Salleh, Sivapalan and Abdullah (2011) indicates, “only 10 percent of the start-ups business survived beyond 10 years marked while more than 90 percent of new start-ups businesses have failed within 5 years of their operations” (p.863) while Rahman, et al., (2016) urged the authority to find solutions for high failure rate among startup in Malaysia. Not to mention, Malaysian researchers in entrepreneurship studies also found out the rate of failure among bumiputera where majority are malay entrepreneurs is highest (Harun & Ibrahim, 2016; Roddin *et al.*, 2011; Abu Bakar *et al.*, 2004) while non-bumiputera are seen more proactive in generating wealth (Zainol & Ayadurai, 2011; Zainol & Daud, 2011).

For nascent entrepreneurs, venture performance becomes an indicator of their survival. Measuring nascent venture’s performance perhaps faces few challenges for researchers especially when measuring performance in the mean of financial data through objective measure. Past studies agreed the reluctance of financial disclosure by business owners (Chandler & Hanks, 1993, 1998; Lee & Tsang, 2001; Honig, et al., 2006; Korunka, Kessler, Frank & Lueger, 2010) and inefficiency financial record system (Devinaga &

Tan, 2012) contributes to these challenges. The complexity of performance measurement also gives a challenge for researchers in Entrepreneurship and Small Business studies. The review on the past studies also concluded that the researchers preferred to use one type of business measurement only in examining the nascent ventures performance (Chrisman, et al., 2012; Ruvio & Shoham, 2010; Vassolo, Mesquita & Cooper, 2010; Korunka, et al., 2010; Jones & Jayawarna, 2010; Baron & Tang, 2009).

The use of one type of performance measurement by previous studies; using financial measurement only is to avoid the complexity in measuring performance itself. Therefore, by using multidimensional measurement, researchers can comprehend the limitation from previous studies. In addition, the complexity of performance measurement involves when the nature of nascent ventures is the risk of “liability of newness”. Therefore, the right strategy should be adopted by nascent venture entrepreneurs for them to be able successfully exit from the emerging stage.

In the study of nascent venture performance, previous studies agreed venture strategy (Ruvio & Shoham, 2010; Salunke, et al., 2013; Hu & Zhang, 2011), resources (Kropp & Zolin, 2005; Semrau & Sigmund, 2012; Hu & Zhang, 2011; Chrisman, McMullan, Ring & Holt, 2012; Wang & Fang, 2012) and environment (Ruvio & Shoham, 2010; Arenius & Minirti, 2005; Hu & Zhang, 2011) are among the major contribution factors to nascent venture performance. While the environment factor is the dominant determinant of nascent venture success (Baron & Tang, 2009; Ruvio & Shoham, 2010; Aziz, 2010; Wang & Fang, 2012), Shah and Ali (2010) found out that resources’ factors like obstacle in financial difficulty, poor management and low adoption of technology



contributed to the business failure. On the other hand, a study done by Ng and Kee (2012) suggested Malaysian SMEs need to improve their venture strategy which emphasize at the organizational innovation, networking, leadership and management, business assistance and market orientation to increase their performance and reduce the risk of failure.

In the entrepreneurial process of nascent venture, the strategy in acquiring the resources is mainly important for ventures development. Resource constraint is the major challenge facing by nascent ventures entrepreneurs. Nascent ventures often facing low credential because of their liability of “newness”, thus it is difficult for them to obtain funds from financial institutions (Senyard, 2009). On the other hand, poor in assessing information of government support also contributes to the resources constrain facing by nascent ventures’ entrepreneurs (Yusoff, 2011). Hence, these challenges offer entrepreneurship researchers in exploring new strategy of acquiring resources in the nascent venture development process.

Introducing by Levi-s Strauss (1967), the concept of bricolage further received the recognition in the entrepreneurship research. Entrepreneurial bricolage has been popularized by Ted Baker, was defined as, “making do by applying combinations of the resources at hand to new problems and opportunities, provides an important pathway to achieve innovation for new resource-constrained firms” (Senyard, Baker, Steffens & Davidsson, 2014, p.211). Bricolage concept offers new opportunities to both researchers and practitioners. However, lack of empirical research has been done to examine the effectiveness of bricolage in business performance. Since the study of bricolage only emerged in entrepreneurship research in early years of 2000, past study

on bricolage focused more on the qualitative and conceptualization studies (Baker & Nelson, 2003; Desa, 2009; Baker, et al., 2003; Domineco, et al., 2010; Senyard, et al., 2010; Illahiane, 2011; Sunley & Pinch, 2012; Linna, 2013; Nowinski & Rialp, 2013; Stinchfield, et al., 2013; Kannan-Narasimhan, 2014). To date, only few of quantitative research done in examining bricolage in relation to sustainable competitive advantages, firm growth and firm performance (Senyard, et al., 2009; Kickul, et al., 2012; Salunke, et al., 2013; Gras & Nason, 2014).

Previous research on bricolage also concerns on how the nascent ventures can achieved the innovation in their development process. Fisher's research (2012) provides a critical examination of how effectuation, causation and bricolage in entrepreneurial research translate into individual behavior and whether such behavior is evident in creation and development of new ventures. Meanwhile, entrepreneurial orientation is a strategic orientation of the firm which reflects the priority that the firm applies in identifying and exploiting market opportunities. Entrepreneurial firms own the ability to innovate and initiate change (Naman and Slevin, 1993). While recent studies have acknowledged the contribution of bricolage on the innovation (Senyard, et al., 2011; Kickul, et al., 2012; Gundry, et al., 2012; Senyard, et al., 2009; 2014; Earnst, et al., 2014), the study in relation bricolage and entrepreneurial orientation is still insufficient (Peltonen & Arenius, 2011). In addition, a study of Peltonen and Arenius (2011) yielded inconsistent findings of entrepreneurial orientation where the relationships between bricolage and competitive aggressiveness and risk-taking to be non-significant.

As a manager and owner of the business, the decision of the business is fall on nascent entrepreneur's wise thinking. This is because all the decisions made by them will lead

to the success or failure of the business. EO (Entrepreneurial Orientation) is widely discussed in the previous study as it is an important measure of the way a firm is organized. Naldi, Nordqvist, Sjöberg and Wiklund (2007) refer EO as a strategic orientation. Although there is massive literature on the relationship between EO and business performance (Ireland, Hitt, & Sirmon, 2003; Zainol, Daud & Muhammad, 2012; Fairoz, Hirobumi & Tanaka, 2010; Hult, Snow, & Kandemir, 2003; Lee, Lee & Pennings, 2001; Wiklund & Shepherd 2003), but previous studies reported that there is lower correlation between entrepreneurial orientation and ventures' performance. Inconsistent findings of the significant relationship of EO and performance in other studies (Lumpkin & Dess, 2001; Zahra, 1991; Fairoz, Hirobumi & Tanaka, 2010) where they even unable to find a significant relationship between EO and performance (George, Wood, & Khan, 2001; Covin, Slevin, & Schultz, 1994) especially the discussions of EO and business performance in the context of how entrepreneurs managed their nascent venture entrepreneurially also still deficient (Kotey and Meredith, 1997).

In emerging phase, resources acquisition is vital for nascent ventures to survive. In contingencies perspectives, understanding of under which situations entrepreneurial orientation enhances venture performance is important to achieve the effectiveness between venture's strategic posture and other constructs of interest (Lumpkin & Dess, 1996). While the study between EO and ventures performance has considerably rich, the inconsistency findings of EO and ventures performance relationship suggested that moderating variables may improve the result of significant relationship (Rausch, et al., 2009; Stam & Elfring, 2008). Previous studies have significantly examined the role of environment factors like dynamism, hostility, turbulence (Aziz, 2010; Lumpkin &

Dess, 2001; Wiklund & Shepherd, 2005; Covin, Green & Slevin, 2006; Cruz & Nordqvist, 2012) and organizational factors like sizes, strategy culture, structure (Alegre & Chiva, 2013; (Lechner & Gudmundsson, 2014, Rausch, et al., 2009) in EO and ventures performance relationship. Whereas much work has focused on the moderating role of environmental and organizational factors, surprisingly few studies have examined how a ventures utilize the available resources of government support and social networking (intangible resources acquisition) to improve nascent ventures performance (Stam & Elfring, 2009; Anderson & Yoshima, 2013).

Government assistance program is proven by conceptual discussion as another contributing factor for early stage ventures to survive (Stanger, 2004; Mohamad, Ibrahim, Muda & Moklis, 2013; Vадnjal, 2011; Lazim & Azizan, 2013; Yusoff, 2011, Yusuf, 2010; Zainol & Daud, 2011; Shanmugam, 2013). A study done by Jamak, et al (2011, p.863) alleged, “mismatch of the services provided in terms of content and entrepreneurial factors are the most reasons cited for the low participation among entrepreneurs in assistance programs”. There were few research studies on the role of government assistance programs (GAP) for entrepreneurs, however the effectiveness of GAP is absented in relative to nascent business strategy (Gomezelj & Kusce ,2013; Belso-Martinez, Molina-Morales & Mas-Verdu, 2011; Zainol & Daud,2011; Yusof, 2010; Kropp & Zolin, 2005; Korunka, Kessler, Frank & Lueger, 2010). The absent of the GAP effectiveness on entrepreneurs in nascent ventures is grounded by the factor of poor formulation, implementation, evaluation and control of the support programs (Curran, 2000).

While recent discussions highlight the importance of how government assistance programs help entrepreneurs to stimulate their venture performance, lack of empirical evidence in proving the effectiveness of government assistance programs towards performance is demanding in entrepreneurship research (Shanmugam, 2013; Yusuf, 2012; Yusuf, 2010; Yusoff & Yaacob, 2010). While study done by Chrisman, et al., (2012) resulted in significant findings between business assistance and new venture growth, the findings from studies Braun (2009) and Pickernell, et al., (2013) demonstrate insignificant result between government business assistance to new firm performance and growth orientation. Surprisingly, a study by Braun (2009) only quantitatively to be not significant, but qualitatively entrepreneurs believed that government assistance is benefiting for their business.

In other discussion of factors contributed to nascent venture performances, Tuanmat and Smith (2011) claimed that most entrepreneurs always strive to alleviate the ventures with the changes of technology and inadequate internal and external resources of the firm. They further argued, there is limited research on how changes in technological and competitive work environments cause strategic change in SMEs and how these changes affect the business performance. The advanced of internet technology gives advantage to entrepreneurs increase their business performance. However, SME Economic Census (2011) reported that there is a low uptake of internet usage by SMEs in Malaysia in their business operation where only 27 percent entrepreneurs adopt ICT and only 12.2 percent used internet for their marketing strategy.

This statistic showed that our entrepreneurs are far behind from western entrepreneurs in terms of projecting the sales growth through the rapid promotion done in various

advertising medium like social media. Social media has provided various platform of interacting with consumer virtually. Among of them, social networking is a most popular site for internet users. Malaysia is reported to have the highest number of social networking sites user's penetration at 94.2 percent as compared to Indonesia at 89 percent and Japan at 57.9 percent. However, the usage of social networking for business is comparatively low compared to other countries. The country like Indonesia has a high social networking user rate for self-employed at 19.44 percent followed by India at 11.32 percent where Malaysia only at 7.71 percent. The low uptake and under-usage of resources available (government support and social networking) lead to the challenges in nascent ventures development. Thus, this study contends to fulfill the practical gap as discussed before.

Theoretically, although resourced based theory is consistently used in examining the firm performance by previous researchers, few empirical studies done by previous researchers reveal that the adoption of configuration theory is superior to a universal approach in predicting business growth of nascent venture (Dess, et al., 1997; Harms, et al., 2009; Michor, et al., 2010). However, in study of Korunka, et al., (2010) examined the effect of personal characteristics, resources and environmental factors towards business survival in their study through contingency theory. The existence of contingency theory resulting the different effect in measuring performance which need to explore further in different kind of economic phase and transitions (Lumpkin & Dess, 1996; Donaldson, 2001; Hofer, 1975; Stam, Arzlanian & Elfring, 2013) in examining the interactions between entrepreneurs, resources, strategy and environmental factors towards performance. In the meta-analysis done by Michor, et al., (2010) found out that environmental influences were almost as extensively researched with 91 percent of all

articles reviewed where they adopt configuration and contingency theory in the nascent venture scope of research. This result indicates there is less research on resources in the configuration and contingency context.

While the resources factors remain to be significant to nascent venture performance, despite of utilization of variable entrepreneurial orientation, the empirical studies have not widely examined the contribution of entrepreneurial bricolage on nascent ventures performance (Senyard, et al., 2009; Kickul, et al., 2012; Salunke, et al., 2013; Gras & Nason, 2014). As entrepreneurial bricolage is a creative strategy adopted by entrepreneurs in resources acquisition, this study intent to extend the previous works of Barney (1992) on RBV, Lumpkin and Dess (1996) on contingency theory, and Gielnik and Frese (2013) on bricolage model. From the above discussions, there is a need of study to fill the gaps on how entrepreneurial strategy improves nascent venture performance through the moderation effect of intangible resources acquisition in the contingency theory. the theory appear necessary for this study in examining the effectiveness the proposed variables and their interaction to commensurate the result of fewer studied done in the previous research and to extend the study of nascent venture performance in Malay entrepreneurs context.

### **1.3 Research Questions**

By identifying the gaps in the previous studies as well as the context of study, this study will address the following research questions.

- 1) Is there any significance relationship between entrepreneurial strategy (entrepreneurial bricolage and entrepreneurial orientation) with performance of nascent venture in Malaysia?
- 2) Does intangible resources acquisition (government assistance program and online social networking adoption) moderate the relationship between entrepreneurial strategy and nascent venture performance in Malaysia?

#### **1.4 Research Objectives**

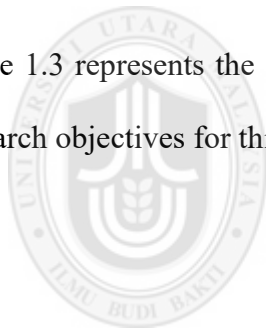
This proposed study examines the factors contributing to nascent ventures' performance in Malaysia. The focus of this study is Malay entrepreneurs who are in the emerging stage or the business is still nascent. Generally, this study proposed the better understanding and the importance of the appropriate strategy and decision making by founders in designing their business efficiently which leads to performance. Below are the objectives underlying for this study;

- 1) To examine the significance relationship between entrepreneurial bricolage with performance of nascent venture in Malaysia.
- 2) To examine the significance relationship between entrepreneurial orientation with performance of nascent venture in Malaysia.
- 3) To evaluate the moderating effect of government assistance programs on the relationship between entrepreneurial bricolage and performance of nascent venture in Malaysia.



- 4) To evaluate the moderating effect of government assistance programs on the relationship between entrepreneurial orientation and performance of nascent venture in Malaysia.
- 5) To evaluate the moderating effect of online social networking adoption on the relationship between entrepreneurial bricolage and performance of nascent venture in Malaysia.
- 6) To evaluate the moderating effect of online social networking adoption on the relationship between entrepreneurial orientation and performance of nascent venture in Malaysia.

Table 1.3 represents the summary of the problem statements, research questions and research objectives for this study.

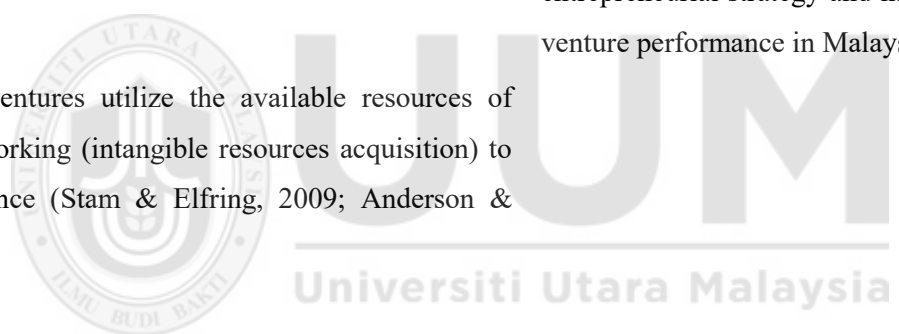


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Table 1.3

*Summary of the problem statement, research objectives and research questions*

| Problem Statement  | Research Questions   | Research Objectives  |
|--|--|--|
| <ul style="list-style-type: none"> <li>The highlight of business failure by previous researchers and the empirical data gathered for the study as showed in Table 1.1 (refer page 7) and Table 1.4 (refer page 13) indicates that there is a need of study on the nascent venture performance. Lack of empirical research has been done to examine the effectiveness of bricolage in business performance where bricolage concept has been extensively discussed in qualitative and conceptual paper (Baker &amp; Nelson ,2003; Desa, 2009; Baker, et al., 2003; Domineco,et al., 2010; Senyard, et al., 2010; Illahiane, 2011; Sunley &amp; Pinch, 2012; Linna, 2013; Nowinski &amp; Rialp, 2013; Stinchfield, et al., 2013; Kannan-Narasimhan, 2014) compared to empirically tested between bricolage variable in relation to sustainable competitive advantages, firm growth and firm performance (Senyard, et al., 2009; Kickul,et al., 2012; Salunke, et al., 2013; Gras &amp; Nason, 2014).</li> </ul> | <p>Is there any relationship between entrepreneurial strategy (entrepreneurial bricolage and entrepreneurial orientation) with performance of nascent venture in Malaysia?</p> | <p>To examine the significance relationship between entrepreneurial bricolage withthe performance of nascent venture in Malaysia.</p>    |
| <ul style="list-style-type: none"> <li>Previous studies reported that there is lower correlation between entrepreneurial orientation and ventures' performance. In addition, inconsistent findings of the significant relationship of EO and performance in other studies (Lumpkin &amp; Dess, 2001; Zahra,1991; Fairouz, Hirobumi &amp; Tanaka, 2010) where they even unable to find a significant relationship between EO and performance (George, Wood, &amp; Khan, 2001; Covin, Slevin, &amp; Schultz, 1994)</li> </ul>  |  | <p>To examine the significance relationship between entrepreneurial orientation with the performance of nascent venture in Malaysia.</p> |

- 
- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li>• The inconsistency findings of EO and ventures performance relationship suggested that moderating variables may improve the result of significant relationship (Rausch, et al., 2009; Stam &amp; Elfring, 2008).</li> </ul>   | <p>Does resources acquisition (government assistance program and online social networking adoption) moderate the relationship between entrepreneurial strategy and nascent venture performance in Malaysia?</p> | <p>To evaluate the moderating effect of government assistance programs on the relationship between entrepreneurial bricolage and performance of nascent venture in Malaysia.</p>    |
| <ul style="list-style-type: none"> <li>• Few studies have examined how ventures utilize the available resources of government support and social networking (intangible resources acquisition) to improve nascent ventures performance (Stam &amp; Elfring, 2009; Anderson &amp; Yoshima, 2013).</li> </ul>   |   | <p>To evaluate the moderating effect of government assistance programs on the relationship between entrepreneurial orientation and performance of nascent venture in Malaysia.</p>  |
| <ul style="list-style-type: none"> <li>• Government assistance program is proven by conceptual discussion as another contributing factor for early stage ventures to survive (Stanger, 2004; Mohamad, Ibrahim, Muda &amp; Moklis, 2013; Vадnjal, 2011; Lazim &amp; Azizan, 2013; Yusoff, 2011, Yusuf, 2010; Zainol &amp; Daud, 2011; Shanmugam, 2013). However, the effectiveness of GAP is absent in relative to nascent business strategy (Gomezelj &amp; Kusce, 2013); Belso-Martinez, Molina-Morales &amp; Mas-Verdu, 2011; Zainol &amp; Daud, 2011; Yusof, 2010; Kropp &amp; Zolin, 2005; Korunka, Kessler, Frank &amp;</li> </ul> |   | <p>To evaluate the moderating effect of online social networking adoption on the relationship between entrepreneurial bricolage and performance of nascent venture in Malaysia.</p> |
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Lueger, 2010). While lack of empirical evidence and inconsistent of findings in proving the effectiveness of government assistance programs towards performance leads to demanding this crucial variable in entrepreneurship research (Yusuf, 2010; Yusoff & Yaacob, 2010; Yusuf, 2012; Shanmugam, 2013).

- Limited research on how changes in technological and competitive work environments cause strategic change in SMEs and how these changes affect the business performance. However, a low uptake of internet usage by SMEs in Malaysia in their business operation where only 27 percent entrepreneurs adopt ICT and only 12.2 percent used internet for their marketing strategy. In addition, the usage of social networking for business is comparatively low compared to other countries. The country like Indonesia has a high social networking user rate for self-employed at 19.44 percent followed by India at 11.32 percent where Malaysia only at 7.71 percent.

To evaluate the moderating effect of online social networking adoption on the relationship between entrepreneurial orientation and performance of nascent venture in Malaysia.

## 1.5 Significance of Study

This research is the extension of Gielnik and Frese (2013), Barney (1991) and Lumpkin and Dess (1996). One of the distinct contributions of this study is it shines a light on an alternative framework of resource mobilization through bricolage theory, entrepreneurial orientation theory and configuration theory. This study is aimed to analyze the interactions of nascent venture strategy of entrepreneurial bricolage and entrepreneurial orientation, intangible resources acquisition (government assistance program and online social networking adoption), and nascent venture performance through contingency approach. A study done by Gielnik and Frese (2013) emphasized the entrepreneurial success model in developing country by integrating individual and contextual factors. In this model, they focused on how the entrepreneurial action and strategy factor, institutions factor and resources factor lead to entrepreneurial success.

In the study of Lumpkin and Dess (1996), their study proposed a contingency framework for investigating the relationship between EO and firm performance. While in the Miller (1987a), different with contingencies theory which focused on the fits between variables, configuration theory describes an organization as a complex entity, which can be characterized by four domains consisting of a certain number of variables (person, strategy, structure and environment) are mutually influencing each other. Although the work by Miller (1987a) seems appropriate in examining factors influenced nascent venture performance, this study focus on the effectiveness of the influenced variable. Rather than configuration theory by Miller (1987a) focused on the fits of each variable by understanding their mutual influenced. In addition, the work by Lumpkin and Dess (1996) and Gielnik and Frese (2013) focuses to grasp the

effectiveness of adopting social networking sites and receiving government assistance programs for nascent business. Thus, contingency theory is appropriate in explaining the effectiveness of the strategy adopted by nascent ventures in Malaysia.

Theoretically, this study offers an insight of the relationship between nascent ventures' strategies (entrepreneurial bricolage and entrepreneurial orientation) with nascent venture performance. While the relationship between entrepreneurial orientation and performance has been extensively discussed in the previous literature (Lumpkin & Dess, 1996; Miller 1983; Dimitratos, Lioukas, & Carter, 2004; Lumpkin & Dess, 2001; Zahra, 1991; Rauch, et al., 2009), this study concerned at the strategy making processes that provide nascent ventures with a basis for entrepreneurial decisions and actions. Further, this study also will look on the moderating effect of resources acquisition by nascent venture in Malaysia. Moreover, by focusing at entrepreneurs of nascent ventures as the subject for this study, it would be an addition to the SME literature as it conducted in Malaysia where there is lack of study focused on nascent ventures at the local context (Egge, Tan & Mohamed 2003; Ahmad & Xavier, 2012).

This study also provides additional knowledge in measuring business performance of nascent venture by assessing of entrepreneur's perception of their own business performance. Delanoe (2011) augmented in her study that by integrating the firm level process in the entrepreneurial development, this study contributed to researchers and practitioners to evaluate the impact of nascent venturing experience has on their startups projects. Through the contingency theory, this study also provides a spectrum of the entrepreneur's perception on the effectiveness of online social networking site and

government assistance program as the imperative approach of entrepreneurs mobilized their resources to achieve the best fit in their business strategy.

As the study focus at the firm level which are focusing at entrepreneurs at the emergence stage in the entrepreneurial process. This study intent to examine the entrepreneurial orientation applies by entrepreneurs of nascent venture, their creativity in utilizing the available resources, their perception on government assistance programs effectiveness joined by entrepreneurs and their perceptions of effectiveness in adopting online social networking for business. The findings from this study would assists management trainers and consultants especially those who are involved in a government assistance programs to identify areas of improvement for entrepreneurs in nascent stage and the appropriate strategy for nascent ventures can apply to their business. Entrepreneurs of nascent venture are known to have little knowledge regarding the business environment as they are still novice in the business area (Long, et al, 2010; Delmar & Davidsson,2000). Therefore, this study contributes an insight for trainers, researchers as well as new nascent entrepreneurs itself to identify the key of ventures strategy which are contribute to the venture performances within the entrepreneurial stage.

In addition, this study also exposed new perspectives to SMEs (Small-Medium Enterprises) entrepreneurs especially those who are in nascent ventures in using the unfilled opportunities in enhancing their business and boosting their sales to increase the productivity level. This study also attempts to provide new information for the future entrepreneurs. The information available can be used to evaluate their decision making in using social media especially online social networks for the purposed of

increased business networking by interacting with the customers, suppliers and stakeholders. In fact, receiving government assistance programs also would be valuable for entrepreneurs especially in nascent stage (Delanoe, 2011; Yusuf, 2012).

Previous research has shown the use of business assistance programs (provided by government or outside company) may enhances the start-up success, survival and performance of nascent ventures (Yusuf, 2012; Jansen & Weber, 2004). However, as discussed in the problem statement, a question of “is assistance programs effective in supporting entrepreneurship if nascent entrepreneurs are not intended to be assist by the trainers?” need to be answered. Furthermore, another question that is critical for this study is whether the assistance programs reach those who (nascent entrepreneurs) need advice and training most? From these questions, this research is providing current information for government, policymakers and stakeholders to review the best strategy to deliver effective assistance programs for new and nascent entrepreneurs. With this, this study is expected to give a guide for entrepreneurs in receiving assistance programs efficiently.

## **1.6 Scope of Study**

Understanding the process of creating business venture is critical for entrepreneurs especially those who are running micro businesses in the early stage. Since nascent ventures tangled with the liability of newness, hence, entrepreneurial strategy is vital for entrepreneurs in the emergence stage. Entrepreneurial strategy is characterized as strategy involving widespread and more-or-less simultaneous change in the pattern of decisions taken by an organization (Sunday & Ariyo, 2017). Nascent ventures usually



operate in poor resources environment. Unlike established firms, emerging ventures like nascent and new firms often begin with few resources (Hallen & Eisenhardt, 2012), and face many challenges that reduce their chances of survival and success (Chen, 2014; Tomy & Perdede, 2018). Thus, this study emphasizes the entrepreneurial orientation and entrepreneurial bricolage as entrepreneurial strategies adopted by nascent ventures in emerging phase of entrepreneurial development.

The scope of study is restricted to entrepreneurs who involved in the creation of autonomous venture, not branches or subsidiaries of existing and established ventures (Ahmad, 2007). This study also focused on the entrepreneur's who's their venture is in the second transition of entrepreneurial process (refer Figure 2.1, p. 37); the firm of conception stage to actual firm birth stage (infancy stage). This study also specifically targets the Malay entrepreneurs only as the main subject of the study. According to recent report by department of statistic Malaysia showed that Malays consisted 89 percent of total bumiputera population in Malaysia (Department of statistic Malaysia, 2010).

By limiting the period of operation for the venture to be below or 5 years of operating, this approach will comprehend the uniqueness of this study on "nascent" venture. This study focuses on the nascent venture, the processes, behaviors and decisions employed by entrepreneurs in their effort achieving the growth status firm and leading to success. Rauch and Frese (2007) point out in their study, by calibrating the study to the same type of attributes of respondent, the examined relationship is more effectively produced

compared having different types of respondents correspond to the different environment of study (Zahra & Garvis,2000; Malecki,2009).

## **1.7 Definitions of Key Term**

### **1.7.1 Nascent Venture Performance**

Due to the newness of the venture, performance of nascent firm is defined as the ability of an emerging business to exist profitably within one to five years of its establishment (Dzathor, Mosley & White, 2013; Driessen & Zwart, 1999).

### **1.7.2 Nascent Venture**

A business venturing by nascent and new entrepreneurs starting from the business idea realization and emerges not more than 5 years of its establishments, to represent their period of emerging stage in entrepreneurial process (Xavier, et al., 2010; Dzathor, et al., 2013).

### **1.7.3 Nascent Entrepreneurs**

Nascent entrepreneurs are individual aged between 18-68 years old (Stel, et al., 2003) who have already started entrepreneurship activities and are in the entrepreneurship process but have not succeeded in creating a new enterprise (Long, Yong &Gao, 2010).

### **1.7.4 Government Assistance Program**

Government assistance programs are formed through the collaboration of government with non-profit organization (NGO) or other private institutions to assist the small

business entrepreneurs especially those who are in nascent stage on their business development.

#### **1.7.5 Online social networking adoption**

Cheng, Hsu, and Wu (2011) defined Online social networking like facebook, twitter, blog, myspace as a “member-based internet communities which allow participants to present themselves, articulate their social network’s, and establish or maintain connections to others” (p.1065) and this medium is used by entrepreneurs in their business.

#### **1.7.6 Entrepreneurial Strategy**

Entrepreneurial strategy is characterized as strategy involving widespread and more-or-less simultaneous change in the pattern of decisions taken by an organization (Sunday & Ariyo, 2017).

#### **1.7.7 Entrepreneurial Orientation**

EO refers to the strategy making processes and styles of firms that engage in entrepreneurial activities (Lumpkin & Dess, 2001). The dimensions of EO were acknowledged by three-dimensions conceptualization, namely innovativeness, proactiveness and risk taking (D. Miller, 1983), the dominant dimensions that are being focused by most of the EO relevant studies to explain the variance in the construct, and being considered to give a great impact in firm’s growth(D. Miller, 1987; Lumpkin & Dess, 1996).

### **1.1.8 Entrepreneurial Bricolage**

EB is a creative and intuitive strategy which influences firms to organise and reorganise resources to adapt to market opportunities or as a reaction to a crisis. It derived from the definition of “making do by applying combinations of the resources at hand to new problems and opportunities” (Baker & Nelson, 2005).

## **1.8 The Organization of Thesis**

This thesis comprises of five chapters. Chapter One addressed overall perspective of the research also included statement of the research problem, the research questions, the research objectives, scope of the study, significance of the research, and conceptualization of variables for this study. Chapter Two described about nascent entrepreneurship, the formation of nascent venture definition based on previous literature, factors influenced nascent ventures performance, strategies emphasized by most nascent venture and resources factors which are found to be as essential criteria for entrepreneurs in developing and sustaining the business entity. In this chapter, the relevant underpinning theories and established relative theories were discussed. Additionally, this chapter also translates literature analysis into workable research framework and present the research hypotheses.

Chapter three elaborates further on selection of the research strategies, methods, and procedures in pursuing the objectives of this study. Particular focuses of the chapter are on instrument development, population and sample description, data collection procedures, non-response bias test, and the validity analysis of the instrument. The next two chapters report the result of the data analyses. Chapter four reports the demographic

analyses of the responding firms and assesses the current state of resources acquisition of nascent ventures. This chapter also examines the impact of entrepreneurial strategy to nascent venture performance and the moderation impact of resources on the relationship between entrepreneurial strategy and nascent venture performance. The final chapter provides an in-depth discussion of the findings, highlights major implications of the study, outlines research constraints, and sets future research directions to extend the present study.

## **1.9 Chapter Summary**

This chapter has presented the background of the study as introduction and describing the problem statements, research objectives and the significance of the study. This research also stressed on the involvement of entrepreneurs at the emerging stage in developing their business to reach the growth stage. With the available business programs offered by the government, this chapter highlights the effectiveness of government assistance program in helping entrepreneurs of nascent venture to succeed and the adoption of social networking sites by entrepreneurs which will give impact to their business performance. Without neglecting the strategies adopted by entrepreneurs of nascent venture, this study is inquisitive the issues highlight in the problem statement subsection and emphasized the importance of this study which are needed to fulfill. In the next chapter, the review of the variables in this study and theory relates to the variable will be discussed further.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter highlights more on nascent entrepreneurs, new entrepreneurs and nascent ventures based on past and present relevant literatures. By focusing on entrepreneurs in the emerging stage, this study aimed to determine the influence factors affecting their venture performance. Therefore, in this chapter the performance of nascent venture will be discussed in terms of its definition, concept and activities of ventures in the emerging stage. Venturing business is a challenging process for nascent and new entrepreneurs as they need to make comprehensive decisions in a poorly structured environment where there is a limited resource available for them. At this point, the best strategies adopted by entrepreneurs are crucial when the changes take part into the entrepreneurial process (Chatterjee, 2014; Korunka, et al., 2010; Hmieleski & Baron, 2009).

In the process of entrepreneurial also, the intervention of decision making made by entrepreneurs reveals how they managed their venture to act entrepreneurially. In addition, the emergence stage most nascent ventures facing the resource constraint challenge as they are in the state of liability of newness. To ring this constraint, entrepreneurs will use whatever resources they must create new opportunities and combating challenges. Further elaboration of nascent ventures strategies adopted by entrepreneurs is reviewed through few related theories to the proposed variables.

While the resources constraint advocates the downfall of new ventures, the availability of support from government is tremendous. In further recognition of preparing nascent and new ventures for the current business challenges and fostering the sustainability of the ventures, current research is beginning to explore how these groups can benefiting from the programs and assistances provided by the government in improving their business ventures. In the meantime, reviewing the adoption of social networking for nascent is one of the growth strategies which are fit for marketing development of nascent venture. The adoption of social networking in business is significant for most entrepreneurs especially for entrepreneurs who are struggling to drive their nascent ventures to success. Social capital theory, bricolage model of entrepreneurial success and Unified theory of acceptance and use of technology (UTAUT) were reviewed in this study to comprehend with the variable NVP, EB and OSN.

## **2.1 The Emerging Stage of Entrepreneurship: The Malay Nascent Venture**

As the entrepreneurship is gearing up the growth of economy, most countries including Malaysia takes comprehensive approach to identify gaps in entrepreneurship development. By not neglecting the role played by entrepreneurs in nascent ventures, there are lots of opportunities to discover by the researchers. The entrepreneurship national research conducted by GEM team takes a broad view in the development of entrepreneurship in Malaysia by highlighting the behavior of individuals regarding venturing a business.

The GEM report documented the development level of entrepreneurship in four types of preferences. They considered the economic development category, region category,

countries category and national category. Appendix A, B, C indicates development level of entrepreneurship based on Global Monitor Entrepreneurship Report. In reviewing the entrepreneurship level across country, GEM divided the countries based on the three level of economic development with two transitions. There were thirteen countries falls under the first phase of factor-driven economy where Algeria, Iran, Libya, Angola, Botswana and Philippines are the countries which are under transition phase (from factor-driven economy phase to efficiency-driven economy phase). Meanwhile, in the efficiency-driven economy phase, there were seventeen countries falls under second transition (from efficiency-driven economy phase to innovation-driven economy phase) including Malaysia. Meanwhile, in the innovation-driven economy phase, it consists of twenty-six countries.

Appendix A represents the countries and their economic development phase while Appendix B showed the statistical result and graph from the GEM studies on the entrepreneurial activity consistent with economic development phase. Statistic from GEM report showed there were inconsistencies results of entrepreneurial activity within three years of research done by GEM researchers. For the TEA rate, it is found that factor-driven economies like Vietnam and Philippines are experiencing increment from 2011 to 2012 but the TEA rate decreased in 2013. While for efficiency and innovation-driven economies, the TEA rate decreased from 2011 to 2012 but increased in 2013 in a smaller rate. Although the establishment of business ownership rate is increased in factor and efficiency-driven economies, however the rate of business discontinuity among nascent and new entrepreneurs is high in the factor-driven economies and efficiency-driven economies (Bosma & Amoros, 2013; Xavier, Kelley, Kew & Herrington, 2012; Kelley, Singer & Herrington, 2011).



The comparison between Asian countries as documented in Appendix C, Malaysia having the lowest nascent entrepreneurship rate while Japan experiencing lowest rate for new business ownership and TEA rate. GEM researchers identified reason why TEA rate is low in the innovation-driven economies is because when people choose employment over starting business as in the innovation-driven economies, the driven sectors of economies is monopolized by industrialization and institutionalization (Bosma & Amoros, 2013). Malaysia is categorized under the second transition in economic development phase which is from efficiency-driven economies to innovative-driven economies (refer Appendix A).

### **2.1.1 Definition of entrepreneur**

There are many people venturing in business, they set their goals, learn and put their efforts. However, many people who begin the process of new venture fail to achieve their goals. In Malaysia, there were successful peoples, but the rate of failure among entrepreneurs compared to successful entrepreneur is considered high (Ridzwan, Muhammad & Rahman, 2016; KiatGan & Almsafir, 2013). In every stage of entrepreneurship, entrepreneurs may face various hurdles and obstacles. In the cycle of human being, babies and young generation is an asset for the creation of one's community, same goes to the cycle of entrepreneurship. Following Reynolds and White (1997, p. 6) and Reynolds (2000, p. 158), Wagner (2007) illustrates the analogy of entrepreneurs will go through the creation process of nascent venture. Figure 2.1 represent the analogy.

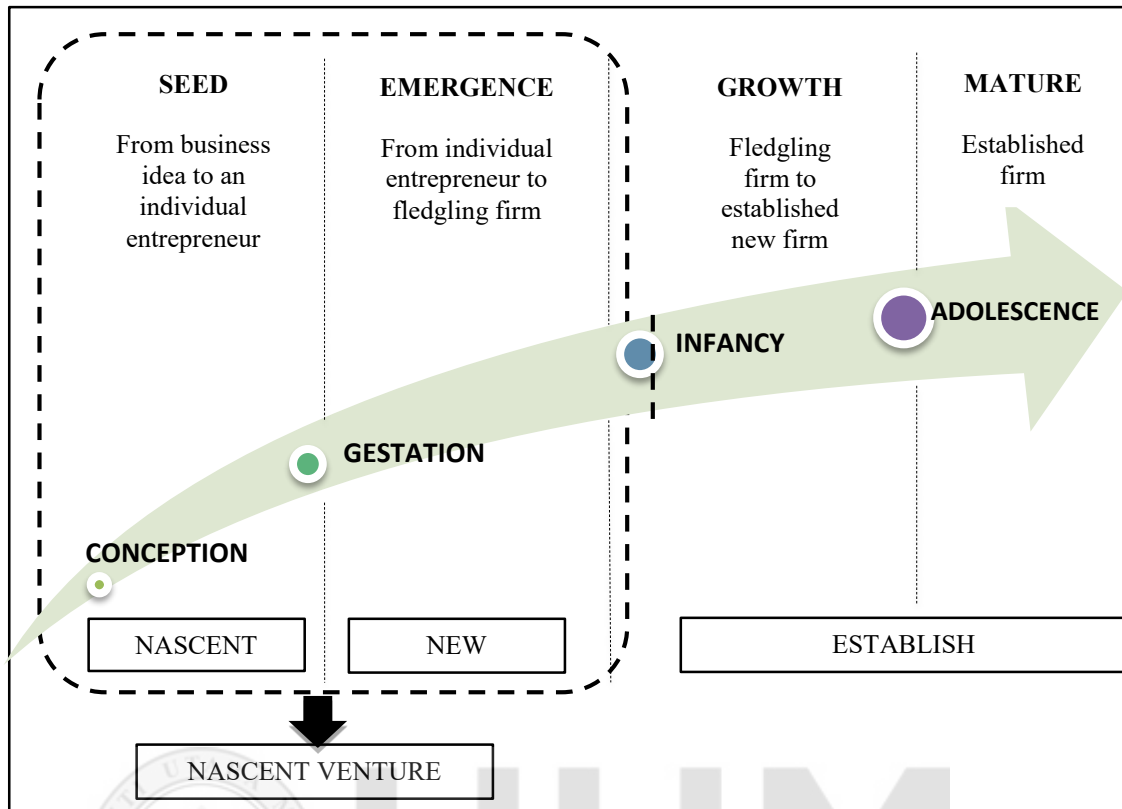


Figure 2.1. The analogy of entrepreneurs' phase in business. Adapted from Bosma & Amoros (2013), Wagner (2004).

The definition of nascent, new or start-up has been used interchangeably in the entrepreneurship research. Thus, to achieve more understanding on those who are regards as nascent, new or start-up, the definition of entrepreneur should be clear. There were various definitions on entrepreneurs. Shane (2003) defined entrepreneur as an individual who discovers, evaluates and exploits the opportunities by introduce new product or service to the market and their major consideration for the reward of the risk taken for the business experiencing the profit. Another definition by Hisrich, Peters and Shephard (2008) explained entrepreneurs are individuals who come out with something new and dare to take risks to create wealth for their ventures.

On the other hand, Madura (2007) defined entrepreneurs as the people whom organize, manage, and calculated the risk of starting a business where he or she has superior

ownership of the business while Cromie and Hayes (1988) sees an entrepreneur as who start new venture independently; which they own and control the venture. Thus, entrepreneur can be understood by someone who are have high intention to start a new venture (Shephard, 2008), already engaged with the process of new venture creation by exploiting opportunities (Mueller, 2007; Choi & Shepherd, 2004; Davidsson & Honig, 2003), possess an entrepreneurial trait like willing to take any risks for their own venture development, able to acknowledge the liability of newness of the venture and independent business venture start-up (Cromie & Hayes, 1988).

### **2.1.2 Nascent in the context of entrepreneur and venture**

From the definition of entrepreneur, the concept of nascent, new or start-up are presented in various studies of entrepreneurship is accordance to the entrepreneur definition. There are various definitions on nascent entrepreneurs. Delmar and Davidsson (2000) defined this group of people as an individual who are trying to start an independent business whereas another researcher explained in their study nascent entrepreneurs, are people who have already started entrepreneurship activities and are in the entrepreneurship process but have not succeeded in creating a new enterprise (Long, et al., 2010).

The concept of nascent in entrepreneurship can be understood as; when someone who starts serious activities that are intended to culminate in a possible business startup (Aldrich & Martinez, 2001). Cassar (2010) has viewed nascent entrepreneur as an individual who are entering self-employment while Carter, Gartner, Shaver and Gatewood (2003) listed the reasons of individual be a nascent entrepreneur is when they

see six elements which are innovative, independence, recognition, roles, financial success and self-realization.

In addition to it, nascent entrepreneurs are labeled by GEM Malaysia researchers' team as, "individuals who are actively committing resources to venture a business that they expect to own themselves, but who have not reached the birth event of the business", while new entrepreneur is defines as "individual who currently own and manage a new business that has paid salaries for more than three months but not more than 42 months are known as new business owner-manager" (Xavier, et al., 2010, p.20). In the global entrepreneurship monitor (GEM) report, the researchers have clearly stated the difference between nascent and new venture based on the age of business.

Thus, the concept of nascent venture can be understood by the process of establishment where it starts from the business ideas to the realization of business ideas to the existent of business (3 months). The business is acknowledged as a new venture when the venturing process takes place after 3 months to 42 months without any disruption of discontinuity event (Xavier, et al., 2010). However, the recent study done by Dzathor, et al. (2013) in examining the nascent venture performance defined that nascent venture performance as an ability of business to grow profitably in 5 years of its establishment. This augment is contradicted with the definition given by the GEM researchers.

While the age of business remains debatable in differentiating the concept of nascent and new venture, Gartner (1985) defined new venture as, "the organizing new organization" (p.697) according to Weickian sense. Gartner (1985) further explained

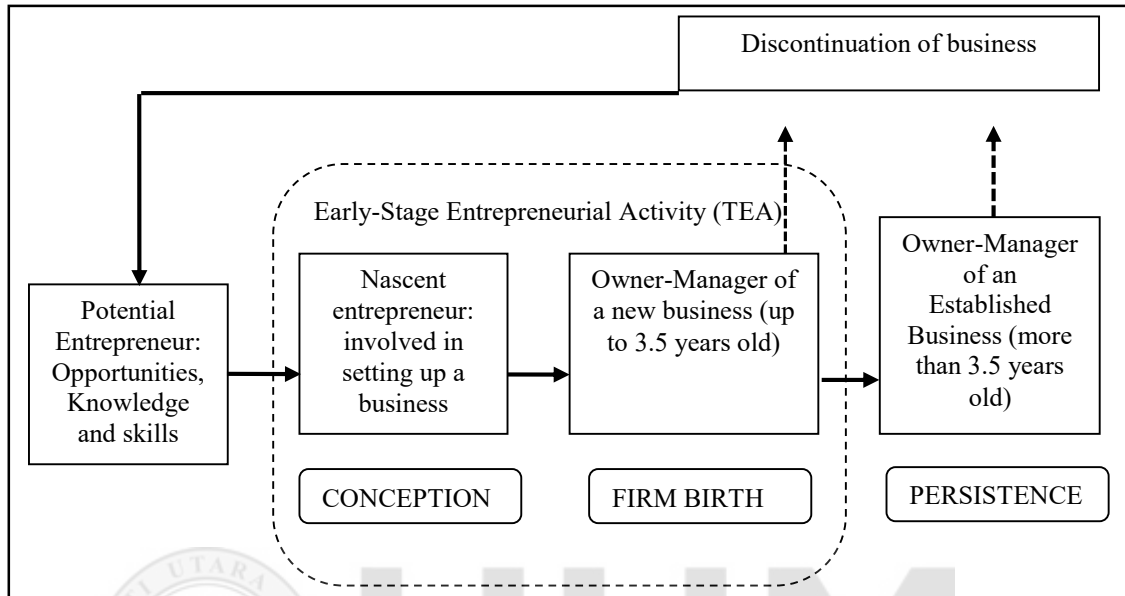
the description of new organization is like the definition given by Strategic Planning Institute which describe new venture as (Gartner, 1985, p.698);

1. An independent entity
2. A new profit center within a company which has other established businesses, or
3. A joint venture which satisfies the following criteria:
  - Its founders must acquire expertise in products, process, market and/or technology.
  - Results are expected beyond the year in which the investment is made.
  - It is considered a new market entrant by its competitors.
  - It is regarded as a new source of supply by its potential customers.

Other researchers also look at the difference between nascent, new and established venture in entrepreneurship the entrepreneurial process. Wagner (2007) agreed that nascent entrepreneurs are characterized by those who are engaged in creating new ventures. The creation of a new business is a process. Reynolds and White (1997) remark the birth of the firm by referring the analogy of biology creation which is considered to have four phases (conception, gestation, infancy and adolescence) with three transitions which is nascent, new and establish ventures.

While Wagner (2004) emphasized the phases and transitions of new venture and how nascent entrepreneurs are born, GEM researcher summarizes the entrepreneurial process and measures the nascent and new entrepreneurs by early-stage entrepreneurial activity (TEA). GEM researcher team divided the entrepreneurial process with three

phases (conception, firm birth and persistence). Figure 2.2 demonstrates the entrepreneurial process and GEM operational definitions.



*Figure 2.2. The Entrepreneurial Process and GEM Operational Definitions. Adopted from Xavier, et al., (2010).*

Meanwhile, Xavier, et al. (2010) emphasized an indicator in identifying nascent entrepreneurs and new entrepreneurs by measuring their activity in early-stage of setting up the business given the period of starting the business is at least three months or more. Wagner (2004) questioned in what activities are nascent entrepreneurs occupied and vigorously engaged in creating new venture. Previous research reported the start-up activities which are commonly done by nascent entrepreneurs are thinking on business seriously, defining business opportunity, investing money for new firm, involving with entrepreneurs' support programs and sought financial support, license, patent, applying permit for premise, modeling the prototype of first product and generating money from sales (Rynolds, 1997; Diocun, Monica, Teresa & Denis, 2001).

Wagner (2004) also reviewed the interviews of Panel Study of Entrepreneurial Dynamic which is reported by Gartner and Carter (2003) on the first behavior of nascent entrepreneurs. In the study, it is founded about 57 percent of nascent entrepreneurs answered on spending a lot of time to think about their business, followed 16 percent who spent their time joining the courses, trainings and workshop on starting business. While 15 percent of nascent entrepreneurs keep their money to invest in business another 14 percent already invested their own money for their new business. New entrepreneurs' activity also is measure same with the nascent entrepreneurs' activity according to GEM studies. As the nascent and new business is measured by TEA rate by GEM studies (Xavier, et al., 2010; Bosma & Amoros, 2013), in the Kauffman studies, the TEA rate is measured through the business timeliness, its dynamic nature, inclusion of all types of business activity, exclusion of "casual" businesses, and information on owner demographics (Fairlie, 2013) while Liao and Welsh (2008) highlighted the entrepreneurial activity in the emerging stage comprised of planning, establishing legitimacy, resource combination and market behaviour.

While the GEM researchers agreed on the definition between nascent and new entrepreneurs can be differentiated in the mean of business age and paying salaries, the other researchers agreed nascent venture is the establishment of business within five years (Dzathors, et al., 2013; Korunka, et al., 2010) and new business can be regard as the establishment of venture is not more than 8 years (Li & Zhang, 2007; Guo, Tang & Su, 2013). From the previous discussions and understanding on the phase of entrepreneurial process, nascent venture can be defined as an independent business managed by nascent entrepreneurs or new entrepreneurs (Wagner, 2007; Ahmad, et al.,

2010). Also, a business which is in the emerging stage of entrepreneurial process (Wagner, 2004; 2007; Bosma & Amoros).

The disputes of the age among previous studies give the challenges in defining the nascent venture (Xavier, et al., 2010; Guo, et al., 2013; Korunka, et al., 2010; Cassar, 2010). Following the recent study on nascent venture performance, Guo, et al. (2013) highlighted that 5 years of establishment is sufficient to measure the performance of nascent venture. While GEM researchers agreed that the TEA period for emerging entrepreneurs is not more than 42 months or 3.5 years from their business establishment (Xavier, et al., 2010; Bosma & Amoros, 2013).

Thus, for this study nascent venture is identified as a business venturing by nascent and new entrepreneurs in between business idea realization and not more than 5 years of its establishments, to represent their period of emerging stage in entrepreneurial process. Previous studies clarified that nascent and new entrepreneurs are the economic agent which contributed more to the GDP growth (Davidsson, 2003; Stel, Carrie & Thurik, 2005; Wagner, 2007), thus the entrepreneurs in the emerging stage is important. Given the contribution of entrepreneurs to GDP is huge, government has put their best effort in reducing the failure rates among the entrepreneurs especially in emerging stage by giving various assistance.

### **2.1.3 Nascent entrepreneurs and economic growth**

It is proven that entrepreneurship is a catalyst for economic growths of the country. Previous researchers acknowledged the importance of entrepreneurship in economic growth by the creation of new jobs that helps reducing the unemployment rate, driven



the innovation which is leading to increase in labor division, increased competitiveness, generating new invention and ideas and social adjustment (Holcombe, 1998; Audretsch & Thurik, 2000; Robson & Bennet, 2000; Gurol & Atsan, 2006; Delanoe, 2011; Ahmad & Xavier, 2012).

However, entrepreneurship is not a real factor to measure economic growth as highlighted by Stel, Carree and Thurik (2005, p.318) in their study where, “entrepreneurship fails to be a well-documented factor in the empirical growth literature because of difficulties defining and measuring entrepreneurship”. Consequently, researchers were agreed to use total entrepreneurial activity (TEA) as an adequate measure for economic growth (Blanchflower, 2000; Carree, Stel, Thurik & Wennekers, 2002; Reynolds, Bygrave, Autio, Cox & Hay, 2002). Besides, Stel et al., (2005) illustrated in their research there is positive relationship between entrepreneurial activity and economic growth where, “...the TEA rate has a negative effect for the relatively poor countries, while it has a positive effect for the relatively rich countries. The results show that entrepreneurship matters” (p.318).

GEM Malaysia Report 2010 highlighted their analysis on TEA rate among different phases of economic development. The analysis of study reported that in 2010, for innovation driven economy like Japan, they are highly known as developed country. However, the TEA rate is the lowest compared to other poor countries at 3.3 percent. From the study, it is founded that Malaysia also experiencing fairly low rate of TEA among the efficiency-driven economies (Xavier, et al., 2010). This analysis reflected that the ratio of TEA to established business owners are decrease when the economic development is increased. Thus, by providing new entry and stiff competition, new

entities of business are seen to be a booster for economic developments of one country. As nascent entrepreneurs come in the market, the TEA rate will increase by the creation of new job, seedbeds for innovation as well as entrepreneurship.

## **2.2 Nascent Venture Performance**

Entrepreneurship is acknowledged as a key driver for economic growth, competitiveness and job creation, the performance of small business also played pivotal role in determining the success of new ventures. Performance is important for entrepreneurs of nascent ventures to evaluate their presence in the market. Alternatively, performance also important for all types of ventures as it has been widely recognized to relate with their profit and survival (Kallerberg & Leicht, 1991; Van Praag, 2003; Bosma, Praag, Thurik & Wit, 2004). In fact, nascent ventures performance also is another source of information for entrepreneurs to do the decision-making process like analyzing, planning, directing and controlling (Zuriekat, Salameh & Alrawashdeh, 2011).

Today's economic is volatile and gives huge challenge for most entrepreneurs, thus measuring venture performance is important. Consequently, there was great interest from academicians in study the performance measurement systems. Looking at growing interest on performance, there are lots of study evaluating the ventures strategies, leadership style, entrepreneurial characteristic with venture performance. Smith and Reece (1999, p.153) defined venture performance as, "the operational ability to satisfy the desires of the company's major shareholders" while Zulkiffli and Perera (2013) added the measure of performance must be assessed to evaluate business venture's

achievement. Previous study evaluated performance by using different variables of instrument and measurement (Soriano & Castrogiovanni, 2012; Lim, Ribeiro & Lee, 2008; Haber & Reichel, 2005; Reid & Smith, 2000).

### **2.2.1 Financial and Non-Financial Performance**

The study done by previous researchers indicated business venture performance usually is measured by referring to the use of set multidimensional. The multidimensional set as it includes both financial and non-financial measures. Financial performance is measuring firm's policies, management and operations in term of monetary firms. Drolet and LeBel (2010) notified that performance is certainly the result of the action and involves the notion of measuring a process achievement. The results will reflect the venture's financial performance in term of efficiency, profitability, solidarity and liquidity. Lugovskaya (2009) postulate in her study that financial ratio has been proved as the most useful tool in measuring the level of performance in one's venture.

For entrepreneurs and researchers find out the position of venture performance, these questions must be answered to get the overall performance of the venture. Are the returns being adequate? How liquid is business? How the venture is financed? How efficient the venture, were questions which represent financial performance. Murphy, Trailer and Hill (1996) highlighted in their studies on "measuring performance in entrepreneurship research" where the accuracy and appropriate measure is important in entrepreneurship research. This is because the development of the venture is depending on the adequate and accurate financial information of the company. Following Venkatraman and Ramanujam (1986) model, Murphy et al. (1996) review the

dimension performance measure commonly used in entrepreneurship research in Table 2.1 and 2.2.

Table 2.1  
*Dimensions of performance and their frequencies*

| Dimension      | Measure                                      | Frequencies of Measures |
|----------------|--|-------------------------|
| Efficiency     | Return on investment                         | 13                      |
|                | Return on equity                             | 9                       |
|                | Return on asserts                            | 9                       |
|                | Return on net worth                          | 6                       |
|                | Gross revenue per employee                   | 3                       |
|                |  | 23                      |
| Growth         | Change in sales                              |                         |
|                | Change in employee                           | 5                       |
|                | Market share growth                          | 2                       |
|                | Change in net income margin                  | 2                       |
|                | Change in owner compensation                 | 2                       |
|                | Change in labor expense to revenue           | 1                       |
|                |  | 11                      |
| Profits        | Return on sales                              |                         |
|                | Net profit level                             | 8                       |
|                | Gross profit margin                          | 7                       |
|                | Net profit from operations                   | 5                       |
|                | Pretax profit                                | 5                       |
|                | Clients estimate of incremental profits      | 3                       |
|                |  | 1                       |
| Size Liquidity | Sales level                                  |                         |
|                | Cash flow level                              | 13                      |
|                | Ability to fund growth                       | 6                       |
|                | Current ratio                                | 5                       |
|                | Quick ratio                                  | 2                       |
|                | Total asset turnover                         | 2                       |
|                | Cash flow to investment                      | 1                       |
|                |  | 3                       |
| Market Share   | Respondent assessment                        |                         |
|                | Firm product sales to industry product sales | 1                       |
|                |  | 2                       |
| Leverage       | Debt to equity                               |                         |
|                | Times interest earned                        | 1                       |

*Source: adopted from Murphy et al. (1996)*

Table 2.2

*Performance Dimensions, Measures of Dimensions, and Frequencies of Measures*

| Financial Ratios | Dimension                    | Description   |
|------------------|------------------------------|---|
| Efficiency       | Turnover 1                   | Sales/Debtors   |
|                  | Turnover 2                   | (Cost of Sales/ Creditors)<br>Net income/ total capital             |
| Profitability    | ROE (Return on equity)       |   |
|                  | ROA (Return of assets)       | Net income/total assets   |
|                  | Gross margin                 | Gross profit/ sales   |
|                  | Net margin                   | Net profit/ sales   |
|                  | Profit sales                 | Profit from sales/sales<br>Total capital/ fixed assets              |
| Solidity         | Capital to fixed asset       |   |
|                  | Working capital to assets    | Working capital/ total assets                                       |
|                  | Long-term debt to capital    | Long-term liabilities/ total capital                                |
|                  | Debt to asset                | Total liabilities/ total capital<br>Total liabilities/ total assets |
| Liquidity        | Cash to current liability    |   |
|                  | Current liability to capital | Cash/ current liabilities   |
|                  | Cash to asset                | Cash/ total assets  |
|                  | Current                      | Current assets/total liabilities                                    |
|                  | Current asset to capital     | Current liabilities/total capital                                   |
|                  | Quick ratio1                 | (cash+shor-term debtors)/current liabilities                        |
|                  | Quick ratio2                 | (cash+shor-term debtors)/total assets                               |
|                  | Current asset to sales       | Current assets/sales  |

*Source: adopted from Murphy et al. (1996)*

While financial data is identified as accurate tools for performance, the violation of the data still occur as most managers avoiding in paying high taxes. On this matter, non-financial data is seen to be most obliging tool in supporting to identify performance level of a venture. In fact, for most nascent and new entrepreneurs, they do not have the appropriate way of recording their financial documents; therefore, measuring non-financial performance is appropriate for nascent ventures. Non-financial data includes number of employees, communication, learning, trust, stakeholder satisfaction, customer satisfaction and competitive position (Saad & Patel, 2006; Sels & Roodhooft, 2005; Othman & Rosli, 2011; Kueng, 2000).

Few researchers' stern with their perception in evaluating business success should comprehend with multiple types of performance (Elche & Gonzalez, 2008; Tseng, Kuo & Chou, 2008) while McDougall, Robinson and DeNisi (1992) emphasized performance associates with the objectives of a financial like profit. Wiklund (1999) suggested performance is best to measure by including growth and financial performance of a venture whereas to some extent, in previous study subjective measurement are used as performance indicator because of unwillingness of business owner to release their financial data (Mahmood & Hanafi, 2013). However, prior study done by Dess and Robinson (1984) indicated objective and subjective measures of performance are interrelated.

### **2.2.2 Objective measure and subjective measure**

The objective measure often thrust aside by most researchers in evaluating the performance albeit the objective is most accurate in measuring venture performance. Zulkifli and Perera (2011) reported that most of the previous studies found data obtain from objective performance always did not correspond to actual performance of a venture. This is resulted from the reluctance of the owner-managers to give the right info about the venture's financial data. In addition, there were few owner-managers manipulate the financial data to avoid the taxes burden as mentioned by Dess and Robinson (1984) in their studies. Thus, subjective measure is seen most appropriate method to use in measuring venture performance of financial data. Toby, Michie, Patterson, Wood, Sheehan, Clegg and West (2004) illustrate the differences between subjective measures with asking respondent to rate their venture performance relative to their competitors, whereas objective measures have been absolute.

### **2.2.3 Measuring performance of nascent ventures**

In analyzing the nascent ventures performance, developing a comprehensive accounting system for their company merely thorny for them. This is because they are lacking in the knowledge, resources and skills. While finding the right measurement of financial performance among nascent ventures is still debatable, there were past studies used three items to capture new-venture financial performance. By indicating the current companies' revenue, growth rates and profit growth rates in a general term (Chandler & Hanks, 1993, 1998; Lee & Tsang, 2001; Honig, et al., 2006) most previous researchers agree that this is the way to avoid the unwillingness to disclose financial information and the accuracy of financial data collected from entrepreneurs in nascent venture is viable for researchers (Zahra, Neubaum, & El-Hagrassey, 2002). This augment also consistent with Wiklund and Shepherd (2005) study where they used self-reported of gross margin of profitability and cash flow relative to competitors to measure the performance of new and small venture.

While measuring nascent venture performance through financial data may be weak as they are lacking in preparing the comprehensive accounting systems, most of the researchers agree that non-financial data is the best to support the performance of the nascent venture (Hoque, 2004; O'Regan & Ghobadian, 2004; Wiklund, 1999; Murphy, Trailer & Hill, 1996). Non-financial performance is measured by the indicators which determine competitive success of company which are prolonged as company's determinant of success (Adams & Sykes, 2003). Customer satisfaction, product quality, and market share are among of the determinants in measuring non-financial performance.

Accordingly, Wiklund (1999) recommends that financial and non-financial measure is interdependent in seeking the best option to measure business performance of the company. The nature of nascent business is they are new, lacking in skills, information knowledge and experience also low access to credit finance front to the company having incomprehensive data. In fact, most study in entrepreneurship concur that obtaining financial data to measure business performance is not accessible especially for those who have incomplete financial data. Therefore, subjective measure is more appropriate in measuring nascent entrepreneur's business performance. Previous studies agreed using subjective measures of company performance is apposite not only because of inappropriate financial records; also, they are cost effective for the researchers (Wall, et al., 2004; Prajapati & Biswas, 2011; Dawes, 1999; Zulkiffli & Perera, 2011).

Table 2.3 below indicates the study by previous researchers on entrepreneurs of nascent venture and how performance is measured. From the 10 studies, 6 of them used subjective measure in evaluating nascent venture's performance. This illustrates that subjective measure is appropriate to use by researchers in nascent ventures study. However, the use of objective measure will comprehend the better results of nascent venture performance. Two studies done by Jones and Jayawarna (2010) and Davidsson and Honig (2003) as show in Table 2.3 concerns on the utilizing objective and subjective measures of business performance among nascent entrepreneurs. Nevertheless, it requires the longer period of studies to obtain financial data within 2 years of minimum business operating. Therefore, using subjective measures for both financial and non-financial is adequate for nascent venture performance



Table 2.3

*Previous studies of nascent venture performance*

| Study                             | Sample  | Performance measure   |
|-----------------------------------|---|---|
| Gomezelj & Kusce (2013)           | 731 of nascent venture in Slovenian   | <b>Firm Performance</b> <ul style="list-style-type: none"> <li>Subjective: Profit, Sales, Market Share, General atmosphere in the firm, product/service offered by the firm, satisfaction with the staff, potential for growth in the future, the professional development and networks</li> </ul>                      |
| Chrisman, et al., (2012)          | 256 individuals who received counseling assistance from the Pennsylvania Small Business Development Center.   | <b>Performance</b> <ul style="list-style-type: none"> <li>Objective: sales and employment</li> </ul>  |
| Ruvio & Shoham (2010)             | 162 nascent ventures of Israel organizations (operated within 12-18 months)   | <b>Venture outcome</b> <ul style="list-style-type: none"> <li>Subjective: no. of customers, no. of volunteer, goals achieved by ventures.</li> </ul>  |
| Vassolo, Mesquita & Cooper (2010) | 95 nascent entrepreneurial teams enrolled in an open-to-public BPCs   | <b>Performance is measured through the venture initialization.</b> <ul style="list-style-type: none"> <li>Binary Variable: 1: team entered the subsequent satisfying stage based on jurist judgment; 0: business plan did not conform to such quality.</li> </ul>   |
| Korunka, et al. (2010)            | 1 <sup>st</sup> stage: 370 nascent entrepreneurs opened their business within 18 months. Questionnaires distribute through mail.<br>2 <sup>nd</sup> stage: 354 nascent entrepreneurs in Austria were interviewed through phone calls. | <b>Business Survival</b> <ul style="list-style-type: none"> <li>Objective: business development patterns, ranging from survival despite a consideration financial loss to strong, business growth and business expansion. The fulfillment of basic liquidity as a condition for measuring business survival.</li> </ul> |

*Continue Table 2.3*

|                          |   |   |
|--------------------------|---|---|
| Jones & Jayawarna (2010) | 243 respondents (nascent entrepreneurs from new entrepreneurship scholarship). 529 respondents participate in first survey, later 497 willing to participate in 2 <sup>nd</sup> survey. in 2 <sup>nd</sup> survey, only 242 respondents respond to the 2 <sup>nd</sup> survey and only 211 were used for the study. | <b>Business Performance</b> <ul style="list-style-type: none"> <li>Objective: State the last year's turnover (1<sup>st</sup> survey in June 2004, 2<sup>nd</sup> survey in June 2006)</li> <li>Subjective: turnover was group and creates the ordinal scale, sales growth.</li> </ul> |
| Baron & Tang (2009)      | 129 new ventures in southern China operating between 8 years and younger.   | <b>New venture performance (financial performance)</b> <ul style="list-style-type: none"> <li>Objective: Sales growth rate, growth rate in profit, employment growth rate</li> </ul>  |
| Reijonen (2008)          | 92 nascent entrepreneurs venturing in rural tourism.  | <b>Firm success related to tangible internal determinants</b> <ul style="list-style-type: none"> <li>Subjective: distribution, product, customer contact, system, control, research and development, technology, supplier reliability and finance.</li> </ul>                         |
| Mambula & Sawyer (2004)  | 61 nascent entrepreneurs of Temple Erako Small Plastic Manufacturing Firms in Nigeria   | <b>Growth and Performance</b> <ul style="list-style-type: none"> <li>Subjective: Employment (number of full-time employees), Sales as a percentage of production, Production (thousand), Assets (Machines), Profit percentage (thousand/Naira), Space (increased).</li> </ul>         |
| Davidsson & Honig (2003) | comparing individuals engaged in nascent activities (n= 380) with a control group (n= 608), after screening a sample from the general population (n= 30,427). The study then follows the developmental process of nascent entrepreneurs for 18 months.  | <b>Successful nascent Outcomes</b> <ul style="list-style-type: none"> <li>Binary Variable: 1 = nascent entrepreneurs, 0 = control group.</li> <li>Objective: exploitation and sales occur in early process</li> <li>Subjective: profit</li> </ul>                                     |

*Notes.* Previous literature on nascent ventures' performance measurements. Adopted from Gomezelj & Kusce (2013); Chrisman, et al., (2012); Ruvio & Shoham (2010); Vassolo, Mesquita & Cooper (2010); Korunka, et al. (2010); Jones & Jayawarna (2010); Baron & Tang (2009); Reijonen (2008); Mambula & Sawyer (2004); Davidsson & Honig (2003).

#### **2.2.4 Measuring online business performance**

When entrepreneurs decide to adopt the social media (blogs, social networking sites, social photo and video sharing also wikis) for the business, thus measuring venture performance cannot solely rely on the financial performance only. In online business, measuring ROI is more applicable and easier compared to offline business. However, ROI (return of investment) in online business is not similar with ROI in offline business. Ventures which operates through online business, the term of ROI is defined as return on influential. The earlier discussion of social media phenomenon and the emergence of social networking in chapter one has highlighted the use of social networking site as the most influential business tool for entrepreneurs. This is because social networking worked on the word-of-mouth basis and driven from social capital theory.

Woolcock (1998) defined social capital in the context of networking where “social capital is a broad term that encompasses the norms and networks facilitating collective actions for mutual benefit” (p.155). While White (2002) see social capital as a notion that is based on the social relations which have potential to facilitate to the accrual of economics or non- economic benefits to the individuals, other researchers founded that social capital is facilitating the relationship of the complex web interactions and communications (Fukuyama, 1999; Putnam, 1993; White, 2002). Lin (2002) notions the social capital by the investment in social relations with expected returns. With the prominent of previous research definitions, social capital is the engaging activities of individual in interaction and networking to produce profit. Thus, online social networking is the platform for individual to accomplish the profit.

The relationship of social capital and social networking can be understood by the word of “influential”. However, in measuring the venture performance of online business, most entrepreneurs’ desires to quantify the generated return by calculating how many products sold in social media or sales growth and ROI of investing in social media. Hoffman and Fodor (2010) believed this is not accurate way to measure ROI when entrepreneurs decide to go with online business. In calculating online business ROI, most entrepreneurs start by measuring the cost of launching blog, social networking sites or any other social media platform, and then seek to calculate the return on sales. Again, Hoffman and Fodor (2010) emphasized in measuring performance effectively, entrepreneurs should start by turning the traditional ROI approach by calculating the returns in terms of customer response. They alleged;

[...] a company should start by thinking about what marketing objectives such as a blog might satisfy (e.g., brand engagement), why its customer would visit the blog (e.g., to learn about new products) and what behaviors they might engage in once they got there (e.g., post a comment about a recent consumption experience). These behaviors can be considered (and measured) as customer investments in the online business. This suggests that returns from social media investment will not always be measured in dollars, but also in customer behaviors (consumer investments) tied to social media applications (p.42).

It is notable that the used of social media like facebook, blogs and other types of social networks subscription is incurred low cost and sometimes no cost for certain applications. Thus, by engaging with customers and evaluating their satisfactions on the services or product offered, the venture performance of online business is accountable. Previous studies agreed that turnover of number of customers is one of indicators in measuring non-financial performance of a venture (Wood, 2006; Zulkifli & Perera, 2011). This study used the comprehensive dimensions in analyzing the nascent ventures’ performance by indicating financial, non-financial and online performance through subjective measurements. Thus, by adapting few works by

previous study completing the measurement for nascent venture performance as discussed in chapter three. Apart from the inclusive of measuring online activity performance by nascent venture, in increasing the customer's turnover rate, entrepreneurs should be able to understand the concept of embeddedness in social capital theory.

### **2.2.5 Social Capital Theory**

Social capital derived from the word capital which can be understood as the stock of resources that a person holds and controls. Capital can be acquired by the means of investment or inheritance. Esser (2008) has agreed that capital can be classified into two dimensions; the first one is autonomy in the production. He further explained on the first-dimension type of capital signifies there are some types of capital which like private goods such as economic capital, human capital and cultural capital. This type of capital does not lie within the power of a single individual, but it acts more as collective goods. The second dimension of capital concerns on the range of uses the capital itself, for example financial fortune in a fungible currency. In the context of social capital, Esser (2008) explained the theory can be understood when, "the actor can mobilize and/ or profit from because of his embeddedness in a network relation with the other actor" (p.23).

The embeddedness in social capital theory is vital for an actor achieved their objectives. Most scholars agreed that embeddedness is recognized in centralized the social relations in economic activities and performances (Berggren & Silver, 2009; Dequech, 2003; Lin, 1999; Xu, Liu, Zhou, & Su, 2012). Embeddedness is the means of the actor is being

interdependent with another actor and activities which are tapped to them. According to Peng et al. (2011) in their studies of technology embeddedness, they claimed that;

The key to understanding the impact of technological embeddedness is the fact that it captures both active and passive aspects of the interaction processes. Actors adopt a technology not only because they feel the pressure to conform to norms in order to get recognition from their peers, but also because they actively engage in learning and experiencing the technology through connections and interactions with their peers. Deeply embedded actors tend to have more connections and interactions with their peers who potentially possess or use the technology (not clear). Increased exposure to the technology can enhance the actors' knowledge about the technology, lower their adoption barriers, and thus facilitate the adoption (p. 417).

While the social capital emphasized on the strength of the collective goods and collaborative work between individual and other actors, the success of one business is depending on the ventures strategy in acquiring and mobilizing resources.

### **2.3 Entrepreneurial strategy of nascent venture**

Entrepreneurial strategy is defined as “the patterns of decisions that shape the venture’s internal resource configuration and deployment and guide alignment with the environment” (Dollinger, 2008, p.112). This definition has two major implications. The first is that “patterns of decisions” means both strategy formulation and strategy implementation. Formulation includes planning and analysis. Implementation is the execution and evaluation of the activities that make up the strategy. The second implication is that the entrepreneur has to consider both internal factors such as the firm’s resources and capabilities, and external factors such as the market environment. A key feature of entrepreneurial strategy is the emergence of a new organizational gestalt demanding strategic change. The new gestalt combined with the motivating influence

of strongly felt organizational purpose will precipitate and energize the strategic changed.

Nascent ventures usually operate in poor resources environment. Unlike established firms, emerging ventures like nascent and new firms often begin with few resources (Hallen & Eisenhardt, 2012), and face many challenges that reduce their chances of survival and success (Chen, 2014; Tomy & Perdede, 2018). Entrepreneurial strategy is characterized as strategy involving widespread and more-or-less simultaneous change in the pattern of decisions taken by an organization. The concept is distinguished from others which use 'entrepreneurial' to characterize a long-term pattern of strategic behaviour. Entrepreneurial strategy will be enacted with some greater or lesser frequency by all firms, whether their long-term behaviour is conservative or innovative. It is hypothesized that such strategy will be observed occurring in cycles at the single business-unit level in response to both environmental and organizational stimuli and that it will reflect choice from a limited repertoire of basic strategic moves (Murray, 1984).

Entrepreneurs encounter the challenges in dealing with resource deficiencies by having few partners, limited financial capital, and no significant market presence in several ways. First, they seek to form partnerships with established firms to obtain financial capital. Meanwhile, Katila, Rosenberger and Eisenhardt (2008) suggesting by mentoring related business models and commercializing technology, it helps nascent ventures tackles the challenges and utilizing available online networks for accessing future resources, (Hsu, 2006; Ozcan & Eisenhardt, 2009; Stuart, Hoang & Hybels, 1999). Second, they try to secure financial resources from external parties. For example,

entrepreneurs carry out a variety of low-cost actions designed to convince individuals and established organizations to invest in their business (Martens, Jennings & Jennings 2007; Zott & Huy, 2007). Third, they ‘make do’ with the realities of their resource-constrained environments. For example, they engage in improvisation and bricolage by recombining elements that others have ignored to get by (Powell & Baker, 2014; Baker & Nelson, 2005).

Meanwhile, other researcher agreed on the importance of entrepreneurial orientation as a firm’s strategic orientation and its ability to capture specific entrepreneurial aspects of decision-making styles, methods and practices (Jalali, Jaafar & Ramayah, 2014; Kajalo & Limblom, 2015; Deniz, 2016; Fellnhofer, Puumalainen & Sjögrén, 2016; Hughes, Hodgkinson, Hughes & Arshad, 2017). Tackling the deficiency of resources constraint by deploying entrepreneurial bricolage and entrepreneurial orientation in the phase of business emergence encountered prolific escaped for nascent ventures. By adopting these strategies, the risk of business failure and business discontinuity being lessen.

## **2.4 Entrepreneurial Strategy of Entrepreneurial Bricolage**

Bricolage is an emerging theory that provides one explanation of how early stage entrepreneurial firms emerge and grow despite the constraints and challenges they face (Baker & Nelson, 2005). Young firms face many challenges in attempts to grow (Shepherd, Douglas, & Shanley, 2000), especially making resource decisions (Varrichio et al., 2012; Kariv & Coleman, 2015). Some firms attempt to reduce the constraints they face through bricolage (Baker & Nelson, 2005; Varrichio et al., 2012;



Kariv & Coleman, 2015). More generally, the literature suggests bricolage has a positive relationship with firm performance through, a. enabling action rather than resource seeking or inactivity (Baker & Nelson, 2005); b. instigating the potential for fast response to challenges and opportunities (namely through improvisation) (Bechky & Olsen, 2011); c. taking advantage of more opportunities in comparison to doing nothing by going where “others fear to tread” (Baker & Nelson, 2005). Bricolage involves seeking out alternative connections between, and dimensions of, relational paths and then to experiment with them to find the best fit between “problems, resources and activities” (Guercini & Runfola, 2012, p. 807). In the broad view of entrepreneurship, many new start-ups begin their operations naturally and utilize bricolage as a development method.

Bricolage is first introduced by Claude Levi-Strauss, a French structural anthropologist, in 1967 in his book, *The Savage Mind*. The term of bricolage implies resourcefulness and adaptiveness, by making do with whatever is at hand. The concept is also used to refer to an entrepreneur who can create something from nothing (Timmons, 1989). Levi-Strauss (1966) used the bricolage term to exemplify the approach taken by ‘primitive’ people to construct myths by making use of their available raw materials, such as trees, animals, etc, in their surrounding environments. Levi-Strauss differentiate the bricoleur to the ‘civilized’ engineer, where these engineers make improvements in a formulaic, methodical manner, whereas on the other hand, the bricoleur is a do-it-yourself individual who improvises and gathers materials around him to devise projects. Hebdige (1979, p. 51) refers to Hawkes’s (1977) clarification of Levi-Strauss’s original definition of bricolage:

“[Bricolage] refers to how the non-literate, non-technical mind of so-called ‘primitive’ man responds to the world around him [sic]. The process involves a ‘science of the concrete’ (as opposed to our ‘civilised’ science of the ‘abstract’) which far from lacking logic, in fact carefully and precisely orders, classifies and arranges into structures the minutiae of the physical world in all their profusion by means of a ‘logic’ which is not our own. The structures, ‘improvised’ or made up (these are rough translations of the process of bricoler) as ad hoc responses to an environment, then serve to establish homologies and analogies between the ordering of nature and that of society, and so satisfactorily ‘explain’ the world and make it able to be lived in”.

Meanwhile, Bjerke and Hultman (2013) defined bricolage as a “way of starting something new by involving actors in a process where genuinely new combinations come up, and existing resources are transformed for old or new purposes”. Baker et al. (2003) introduce the concept 'network bricolage' as ‘dependence on pre-existing contacts at hand’. While Vanevenhoven et al. (2011) view bricolage as a successful behaviour for an entrepreneur because by using readily available resources and prior knowledge they can reduce uncertainty and exploit an opportunity. Lévi-Strauss (1967) offered no specific definition of bricolage, and scholars have applied his insights to a vast range of phenomena, also without converging on a concise or consistent definition. In the Baker and Nelson (2005) empirical research in defining bricolage through Levi-Strauss descriptions, they observed bricolage within three characteristics. First, resources at hand. Second, recombination of resources for new purposes and last is making do.

Entrepreneurs often lack resources. Thus, they either seek resources from others to provide the “slack” necessary to experiment and generate entrepreneurial opportunities, or they engage in bricolage. By bricolage, we mean that some entrepreneurs make “do by applying combinations of the resources at hand to new problems and opportunities.” This involves taking existing resources (those at hand) and experimenting, tinkering,

repackaging, and/or reframing them so they can be used in a way for which they were not originally designed or conceived. From this process of “making do,” entrepreneurs can create opportunities (Baker & Nelson, 2005, p.341–342).

#### **2.4.1 The characteristics of Entrepreneurial Bricolage**

In reviewing the literature on bricolage, Baker and Nelson (2005) characterize bricolage as a concept having three core elements; resources at hand, recombination of resources for new purposes and making do. Baker and Nelson (2005) dealt particularly with conditions of extreme environmental constraint and argued that bricolage enables entrepreneurial activity under conditions where the startup, growth or survival of a venture (and, by implication, the entrepreneur) might not otherwise be possible.

##### **2.4.1.1 Resources at hand**

Lévi-Strauss (1967) noted that the bricoleur (someone engaged in bricolage) possesses a set of “odds and ends,” which in the form of physical artifacts, skills, or ideas that are accumulated “on the principle of they may always come in handy. Reliance on the resources at hand captures the role of external resource constraints and echoes but is also broader than Penrose’s (1959) notion of the “crucial role” of the “inherited” internal resources of the firm in determining its short-term possibilities for growth. In defining the resources at hand, the view of resources available is very cheaply or for free, often because others judge them to be useless or substandard. Baker and Nelson (2005) viewed resources at hand through inputs of physical, labor, skills, customers or markets, institutional and regulatory environment. They further described those resources as below;

- **Physical** as by imbuing forgotten, discarded, worn or presumed “single-application” materials with new use value, bricolage turns valueless or even negatively valued resources into valuable materials.
- **Labor** is reviewed as resources at hand by involving customers, suppliers, and hangers-on in providing work on projects, bricolage sometimes creates labor inputs.
- **Skills** as by permitting and encouraging the use of amateur and self-taught skills (electronics repair, soldering, road work, etc.) that would otherwise go unapplied, bricolage creates useful services.
- **Customers or market** is defined by providing products or services that would otherwise be unavailable (housing, cars, billing system, etc.) to customers (because of poverty, thriftiness, or lack of availability), bricolage creates products and markets where none existed.
- **Institutional and regulatory environment** is reviewed as resources at hand by refusing to enact limitations about many “standards” and regulations, and by actively trying things in a variety of areas in which entrepreneurs either do not know the rules or do not see them as constraining, bricolage creates space to “get away with” solutions that would otherwise seem impermissible.

#### 2.4.1.2 Recombination of resources

Another central theme running through many studies invoking bricolage is the combination and reuse of resources for different applications than those for which they were originally intended or used (Lévi-Strauss, 1967). The process of combining resources for new purposes sometimes serves as a mechanism driving the discovery of innovations in the form of new “services” from existing resources. For example,

previous research described the concept of bricolage to argue that the development of useful strategic information systems often follows an improvised (Miner, Bassoff, & Moorman, 2001; Ciborra and Lanzara, 1990; Lanzara, 1999; Ciborra, 2002), meandering, and pathdependent trajectory dominated not by clear vision and careful a priori planning but by serendipitous combinations of existing programs, pasted-up solutions, and failed components put to unexpected uses (Miner, Bassoff, & Moorman, 2001).

Meanwhile, in the entrepreneurship field, recombination of resources is perceived by firms that made do with what was at hand tended to favor recombining existing elements rather than fabricating them from scratch (Baker & Nelson, 2005). They further observed patterned variation in our firms in terms of their generation of useful combinations and noted that these patterns seemed to have some identifiable organizational antecedents and important consequences in terms of organizational growth. Although much of the literature on entrepreneurship and economic development has long assigned the recombination of existing elements a prominent role in economic growth and innovation (Schumpeter, 1934; Hirschman, 1958; Stark, 1996), most of it, including Penrose's work, says little about how these recombinations come about (Baker & Nelson, 2005).

#### **2.4.1.3 Making do**

Lévi-Strauss (1967) described the “rules” of the bricoleur’s “game” as ‘always to make do with whatever is at hand’. Making do has taken on a variety of meanings, in common across these meanings, making do implies a bias toward action and active engagement with problems or opportunities rather than lingering over questions of whether a

workable outcome can be created from what is at hand. This does not imply that bricolage always produces only mundane and highly imperfect solutions. Similarly, DiDomenico, Haugh and Tracey (2010) characterize bricolage as making do with available resources, a refusal to be constrained by limitations, and improvisation. These descriptions are not inconsistent with the work of Sarasvathy (2001, 2008) who argues that successful entrepreneurs more skillfully or completely exploit established social relationships, existing knowledge, and claimable identities to reduce the risk of investment loss in a new venture. Sarasvathy examines closely the mental processes of entrepreneurs, and then makes a strong case for using this information to derive theory that elucidates effective practice. The making do aspect emphasizes on dynamic involvement over exhaustive thinking and planning. Making do does not imply that a solution is highly imperfect; it is a construct that forces an individual to act instead of contemplating whether the existing resources will lead to an optimal result (Baker & Nelson, 2005; Bjerke & Hultman, 2013).

#### **2.4.2 Entrepreneurial strategy of bricolage in resource poor environment.**

Empirical research into entrepreneurial bricolage include strategising to overcome resource constraints successfully to create a competitive advantage (Baker, 2007; Baker et al., 2003; Senyard et al., 2011; Varrichio et al., 2012; Kariv & Coleman, 2015). Baker and Nelson (2005) explained how bricolage works in poor resources environment. Bricolage is also described as a process whereby different inputs or creative capital (Merkel, 2013; Pierce et al., 2012), derived from blending skills, abilities, ideas, vision, products (Öberg, 2013) and innovative processes (Potts, 2011) reach the same goal through mentoring and sharing visions of skills development and overall career advancement (Powell et al., 2012). Bricolage represent a more dependable picture of

entrepreneurial process as it occurs in practice, enabling stakeholders in and around the entrepreneurial world to better grasp the realities of start-up process and behaviors (Fisher, 2012). Figure 2.3 explains how Baker and Nelson (2005) formulate bricolage as an entrepreneurial strategy in resources poor environment through five domains; available resources at hand, firm strategy based on available resources, combination of available resources, create new opportunity and obtained value creation.

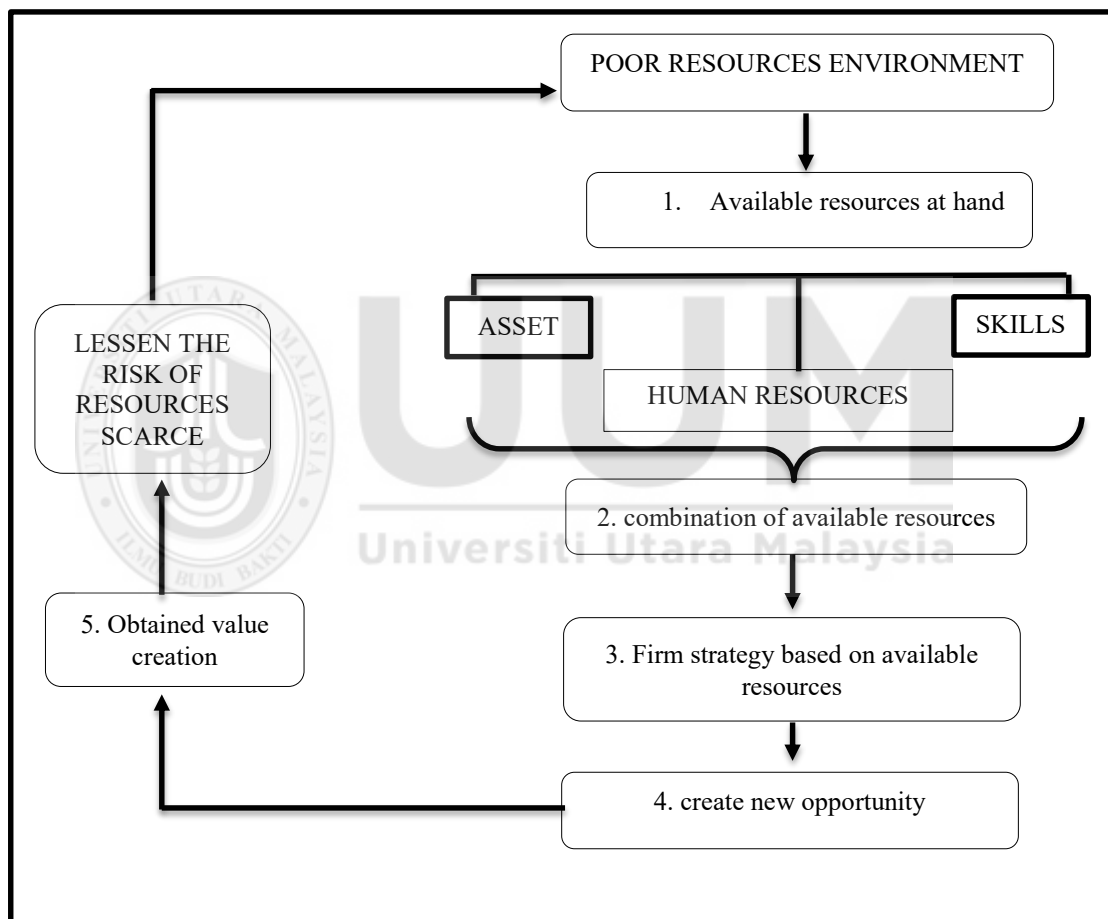


Figure 2.3. Resources reconstruction process through bricolage concept adapted from Baker and Nelson (2005).

Entrepreneurs often attempt to overcome resource constraints by engaging in resource seeking behaviors, for example by engaging in sometimes time-consuming processes of trying to attract new investments into their firms (Brush, Greene & Hart, 2001). Meanwhile, Baker and Nelson (2005) discussed in their article in examining the process

of resources reconstruction through the bricolage concept for those entrepreneurs in poor-resources environment. Emphasizing new firms which were begin with limited resources, they formulate how entrepreneurial bricolage concept were deployed within the concept of resources at hand, recombination of resources and making do (Baker & Nelson, 2005). From the Figure 2.3, bricolage takes places when entrepreneurs identify what kind of resources available for them included physical, labor, skills, customers or markets, institutional and regulatory environment. Then entrepreneurs recombined the available resources and deploys the appropriate strategy to create new opportunity for their ventures.

When the new strategy is fruitful, the value creation is added and lessen the risk of resources scarces. In fact, participating with government programs to enhance their ventures' growth (Kropp & Zolin, 2005; Chrisman, et al., 2004) and actively participate in social media medium (Xu, 2016; Tiwana, 2008; Steier & Greenwood, 2000) were opportunities created through bricolage concept. They may also respond to resource constraints by deciding that now is not a good time to pursue a new opportunity. Such time-consuming delays may be particularly common among nascent entrepreneurs, because they don't face the pressures of day-to-day operations may find it easier to wait for a "better time" or to control more resources before acting. In bricolage, however, "making do" includes a bias for action (Baker & Nelson, 2005; Stark, 1989), suggesting that entrepreneurs construct and pursue opportunities without potentially delaying attempts to pursue the "right" resources for the challenge.

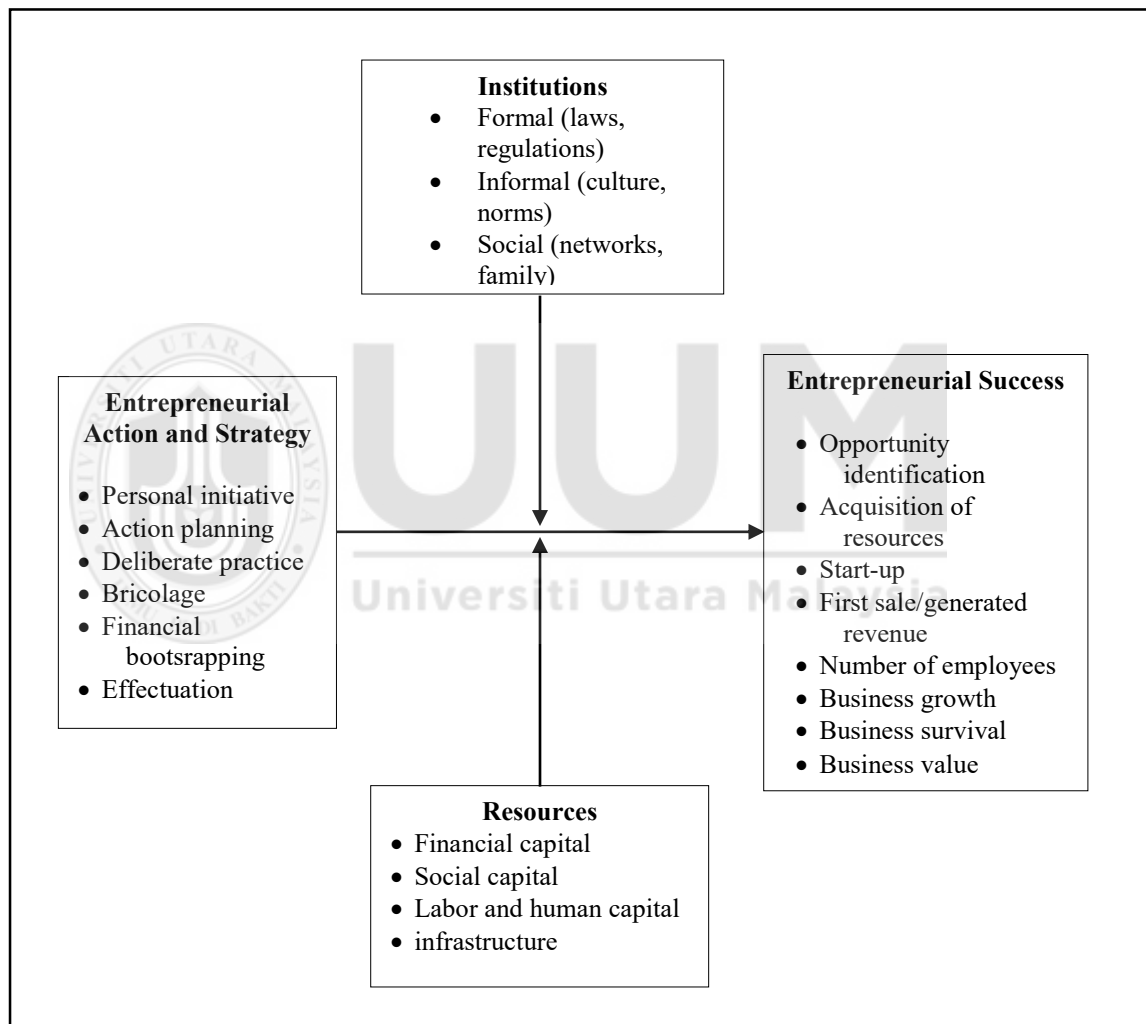


### 2.4.3 Entrepreneurial bricolage model.

The theory of bricolage is an emerging theory in entrepreneurship research as it first introduced by Levi-Strauss (1967) in engineering field of study. The variable of bricolage is popular in emergence phase of business cycle research like nascent, new, start-up and emerging firms. This is because the concept enfold the 'liability of newness' of the ventures which are characterised as a poor-resourced firm (Baker & Nelson, 2005; Varrichio et al., 2012; Kariv & Coleman, 2015). In entrepreneurship research, Ted Baker and Reed E. Nelson among the popular researchers in entrepreneurial bricolage study. Their paper published in 2005, titled "*Creating something from nothing: Resource construction through entrepreneurial bricolage*" has recurrently cited by recent researchers of entrepreneurial bricolage. One of them are Micheal M. Gielnik and Michael Frese.

The model developed by Gielnik and Frese (2013) explained the importance of bricolage as one of action strategies in resource-constrained environments. Previous scholars in entrepreneurship research agreed on entrepreneurs in developing countries often facing scarce resources from capital, product, and labour market (Seelos & Mair, 2007; Gielnik & Frese, 2013) especially they are constrained with physical, organizational and technological resources (West, Bamford & Marsden, 2008; Kropp & Zolin, 2005; Gielnik & Frese, 2013). Twigg with previous work of Baker and Nelson (2005), Gielnik and Frese (2013) reviewed the bricolage concept in poor resources-environment with five domain as discussed in sub-section 2.4.2. They agreed that bricolage is a useful strategy which were quickly respond to opportunity and to successfully deal with the challenges in adverse business environment (Gielnik &

Frese, 2013; Baker & Nelson, 2005). Extending the previous work of theoretical binding of bricolage subject, Gielnik and Frese (2013) developed a theoretical model of entrepreneurial success in developing countries by integrating individual and contextual factor. They examined the factors of individu as an entrepreneurial action and strategy, and contextual factors of institutions and resources in relation of entrepreneurial success as illustrate in Figure 2.4 below.



*Figure 2.4.* Entrepreneurial strategy of bricolage in theoretical model of entrepreneurial success in developing countries by integrating individual and contextual factor. Adopted from Gielnik, M.M., & Frese, M. (2013). Entrepreneurship and poverty reduction: Applying I-O Phsycology to microbusiness and entrepreneurship in developing countries. In J. Olson-Buchanan, L. Koppes Bryan, & L. Foster Thompson (Eds.), Using I-O Psychology for the Greater Good: Helping Those Who Help Others (pp. 394-438). New York: Routledge, Taylor and Francis.

This entrepreneurial success model was developed in the context of developing countries and can be used as a reference of evidence-based entrepreneurship concept (Gielnik & Frese, 2013). The findings of this model are advocated that entrepreneurship is an importance tool in poverty eradication and an opportunity in creating wealth (Acs, Desai, & Hessels, 2008; Ahlstrom, 2010; Wong, et al., 2005; Gielnik & Frese, 2013). The model covers all influenced factors of entrepreneurial success which is rooted by I-O psychology theoretical model and action theory as the underpinning model. I-O psychology explains how entrepreneurs as an agent of change, are the central of entrepreneurial success. Meanwhile, by integrating factors of institutions and resources have indirectly affect the economic development through the creation of entrepreneurship. In addition, action theory explaining the successful action and performance in the context of poverty reduction in developing countries.

As the bricolage is one of the contingent factors of entrepreneurial success in Gielnik and Frese (2013) model, this model has fully supported that bricolage works with the nascent ventures, new ventures, start-up or emerging firms. A study from Senyard, et al. (2009) has verified quantitatively that bricolage has positive significant effect on nascent venture performance meanwhile it turns to u-shaped findings as firm grows, it established a negative significant effect on firm performance. Thus, bricolage may be a useful strategy that helps people to engaged with entrepreneurial activity even in poor-resource environment. Although it was a good strategy for nascent, Baker and Nelson (2005) prompted that bricolage may worked consistently over longer period in terms of business survival but not in terms of business growth. Significance with this research, a study of nascent ventures of their performance, the outcome of bricolage findings

added and supported the existing theoretical work of previous studies by Gielnik and Frese (2013).

#### **2.4.4 Entrepreneurial Bricolage and Nascent Venture Performance.**

Despite the lack of consensus in the literature regarding bricolage and firm performance (Senyard et al., 2014; Senyard, Baker & Steffens, 2010), bricolage has more frequently been associated with positive firm effects through the development of innovative solutions which redefine existing resources to create novel combinations for meeting new challenges and opportunities with new solutions (Baker & Nelson, 2005). Prior literature indicates that bricolage plays an important role in overcoming resource scarcity through product innovation (Cunha et al., 2014), as a means for creating dominant industry designs (Garud & Karnøe, 2003), the development of creative work arounds to challenges faced in established firms (Orr, 1996) or to create critical innovative solutions where none previously existed (Mair & Marti, 2009; Zahra et al., 2009).

Bricolage has been widely studied in resources poor environment (Baker & Nelson, 2005; Senyard, et al., 2009; Klerk, 2015; Davidsson, et al., 2017). Some scholars have posited that entrepreneurs who run under significant resource limitations will demonstrate higher levels of creativity in new product and service development than founders with ample resources for their enterprises (Fisher, 2012; Klerk, 2015; Senyard, et al., 2011; Ernst, et al., 2014). The process of understanding how resource-scarcity innovations occur has not been well explored, and bricolage can contribute to a fuller explanation of how these innovations arise (Linna, 2013; Bacq, et al., 2015). It is likely that resource-poor innovators invent or discover resourceful innovation in unexpected

ways (Välikangas and Gibbert, 2008; Halme et al, 2012; Bacq, et al., 2015). However, as noted by Stinchfield et al (2013), bricoleurs are not motivated by financial performance and, with little debt, they can survive in any economic context and conditions.

A study by Stinchfield et al (2013) posited bricolage does affect firm's longevity with low performance where entrepreneurs who are in poor financial performance, able to survive their ventures in a longer period. This study contradicts with few studies where bricolage concept only practically beneficial for nascent ventures. Senyard, et al. (2009) discussed in their findings where bricolage give significant effect towards performance for nascent ventures only while for young firms it significance in the first wave of sales given time continues, the relationship between bricolage and performance is not significant. Meanwhile, Kariv and Coleman (2015) in their study postulates similar results with Senyard, et al. (2009). Results clearly show that the indices representing business performance in the second to fifth years were significantly and positively affected by the loans secured in the early years, mainly in the second year. This result, however, does not emerge for the sixth year of operation. These findings so far suggested that entrepreneurial bricolage is among importance strategy for nascent and emerging ventures to survive and increased their performance. In addition, there is less study of the relationship between bricolage and performance quantitatively where research on entrepreneurial bricolage has been hampered by the lack of robust instruments that allow large-scale theory testing (Davidsson, et al., 2017) and most of previous researcher deliberate entrepreneurial bricolage in qualitative method (Baker & Nelson, 2005; Garud & Karnoe, 2003; Klerk, 2015; Mody & Day, 2017). Table 2.4 below indicates previous literatures on bricolage and performance.

Table 2.4

*Previous study on relationship between entrepreneurial bricolage and various type of performance.*

| Author                             | N                                       | Independent Variable                    | Dependent Variable              | Findings  |
|------------------------------------|---|---|---------------------------------|---|
| Baker & Nelson (2005)              | 29 resources-constrained firms.         | Bricolage                               | Growth                          | Bricolage influenced poor resourced firms to grow resulting from 'creating from nothing'.   |
| Senyard, Baker, & Davidsson (2009) | 977 nascent firms and 1011 young firms. | Bricolage                               | Firm performance                | Sig. (+) for nascent firms<br>Sig. (-) for young firms  |
| Senyard, et al. (2011)             | 658 nascent and young firms.            | Bricolage                               | Innovation                      | Sig. (+)  |
| Gundry, et al. (2012)              | 113 social entrepreneurs.               | Bricolage                               | Catalytic innovation            | Sig. (+)  |
| Stinchfield, Nelson, & Wood (2013) | 23 diverse entrepreneurs.               | Bricolage                               | Financial performance           | Bricolage does affect firm's longevity with low performance (poor financial performance, longer period of firm able to survived). |
| Mohr, Garnsey, & Theyel (2013)     | 2974 high technology firms.             | Bricolage                               | Rapid growth                    | Not sig.  |
| Salunke, et al. (2013)             | 192 projected oriented firms.           | Bricolage                               | Sustained competitive advantage | Sig. (+)  |
| Gras & Nason (2014)                | 6,800 household                         | Bricolage (family household diversity). | Firm performance (sales)        | Sig. (+)  |
| Ernst, et al. (2014)               | 215 forbes companies                    | Bricolage                               | Innovation performance          | Sig. (+)  |

*Sources.* Adopted from Baker & Nelson (2005), Senyard, Baker & Davidsson (2009), Senyard, et al. (2011), Gundry, et al. (2012), Stinchfield, Nelson, & Wood (2013), Mohr, Garnsey & Theyel (2013), Salunke, et al. (2013), Gras & Nason (2014), Ernst, et al. (2014).

## **2.5 Entrepreneurial strategy of Entrepreneurial Orientation**

The term entrepreneurial orientation refers to the organizational methods, styles, practices, and decision-making strategies employed by firms that lead to new entry (Lumpkin & Dess, 2001). Meanwhile, past studies agreed that entrepreneurial orientation (EO) is an important concept in entrepreneurship which postulates the entrepreneur's decision-making strategy at firm-level, including their managerial philosophies in finding and exploring new opportunities for firm growth and survival (Wales, Parida, & Patel, 2013a; Hughes, et al., 2017). The firms with entrepreneurial-oriented behaviors tend to concentrate better resource utilization, and tend to engage in product market innovation, undertake risky ventures, and come up with proactive innovations to beat the competitors.

Lan and Wu (2010) explained entrepreneurial orientation represents the specific style and method about strategic guidance, decision making and implementation of enterprises. Knight (2000) has analyzed the relationship between entrepreneurial orientation, marketing strategies and entrepreneurial performance of SMEs in the global context. This study proved that entrepreneurial orientation was an influenced factor in determining the best strategies for venture performance.

Entrepreneurial orientation also played an important role in sustaining the organization in the stiff competitive market. Wiklund and Shepherd (2005) emphasizes that venture performance is a company's competitive advantages, thus they again proved the entrepreneurial orientation have significant relationship with the venture performance. Seeing the importance of entrepreneurial orientation in one's venture, numerous studies

have found the dimension of entrepreneurial orientation helps to improve the ventures profit (Chow, 2006) and realization of strategic capability (Lan& Wu, 2010). Again, Lan and Wu (2010) addressed ventures which have high entrepreneurial orientation are founds to have high survival rate in the future.

The development of the entrepreneurial orientation construct is an appearance of a conception of entrepreneurship as enterprise behaviour (Lumpkin & Dess, 1996). The term entrepreneurial orientation is used to refer to the set of personal psychological traits, values, attributes, and attitudes strongly associated with a motivation to engage in entrepreneurial activities (McClelland, 1962; Dunkelberg & Cooper, 1982; Hornaday & Aboud, 1971; Timmons, 1978). In research of entrepreneurial orientation, Miller (1983) used the dimensions of “innovativeness,” “risk taking,” and “proactiveness” to characterize and test entrepreneurship. Two more dimensions, as stated by Lumpkin and Dess (1996), are described as autonomy and competitive aggressiveness. Thus, generally suggested by Lumpkin, and Dess (1996), there are five salient dimensions to explore the multi-aspects reviews in entrepreneurial orientation which consists of autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness.

Autonomy is defined as an independent action undertaken by entrepreneurial leaders or teams directed at bringing about a new venture and seeing it to fruition (Rauch, et al., 2004). Innovativeness reflects a firm’s willingness to promote new ideas, novelty and creative solutions (Richard et al, 2004) whereas risk-taking concerns a firm’s propensity to take business-related chances regarding strategic actions when faced with uncertainty (Richard et al, 2004). Proactiveness refers to a firm’s initiative in seizing



opportunities in the marketplace (Lumpkin & Dess, 2001). Competitive aggressiveness is concerned with the intensity of the combative posture adopted by firms reacting to competitive trends and market demands (Lyon et al, 2000).

### **2.5.1 The characteristics of entrepreneurial orientation**

Entrepreneurial orientation has been recognized as most popular variable and received substantial conceptual and empirical attention in the field of entrepreneurship research (Rauch et al., 2009; Justin, et al., 2010; Wales et al., 2013; Jajali, et al., 2014; James, et al., 2015; Deniz, 2016). It has been argued that entrepreneurial orientation comprises five dimensions: innovativeness, risk-taking, proactive and competitive aggressiveness and autonomy (Lumpkin and Dess, 1996). However, EO is usually associated with only three dimensions: innovativeness, proactiveness and risk-taking (Matsuno et al., 2002; Miller, 1983; Wales et al., 2013; Jajali, et al., 2014; James, et al., 2015; Deniz, 2016).

Additionally, most of the previous researches achieved inconsistency of findings for the variable autonomy and competitive aggressiveness (Covin and Covin, 1990; Lumpkin and Dess, 1997; Lumpkin and Dess, 2001; Awang, 2006). Meanwhile, recent studies also proved that innovativeness, proactiveness and riskiness has been accurately accepted as dimensions of entrepreneurial orientation in measuring ventures' strategy towards performance (Jajali, et al., 2014; James, et al., 2015; Deniz, 2016).

#### **2.5.1.1 Innovativeness**

Innovativeness refers to the effort of a firm in finding new opportunities and new solutions. This involves an experimentation and creativity that result in the

development of new goods and services or improvement of technological processes (Covin and Miles, 2006; Schumpeter, 1934). Lumpkin and Dess (2001) define entrepreneurial innovation as “[...] creativity and experimentation in introducing new products or services, and novelty, technological leadership and R&D in developing new processes” (p. 431). With respect to corporate entrepreneurship, Covin and Miles (2006) argue that innovation is central without which the notion does not exist. Hence, to be entrepreneurial or exhibit an EO firms must exhibit behavioral actions that are exemplars of innovation irrespective the presence of other dimensions of entrepreneurial behavior.

#### **2.5.1.2 Proactiveness**

Venkatraman (1989) defined proactiveness as opportunity seeking related or not to existing business activity, new product or brand introductions before competitors, and strategic discontinuance of operations in the face of declining markets. Proactiveness is associated with seeking first mover advantage and forward-looking efforts to shape the firms' business environments thereby introducing products and processes ahead of competitors (Lyon et al., 2000). In other words, proactiveness refers to an opportunity-seeking and forward-looking behavior that are characterized by the introduction of new products or services ahead of competitors in an anticipation of future demand (Rauch et al., 2009).

It also includes initiative efforts and applying existing advantages in shaping a business environment and responding to competitive challenges (Wang et al., 2001). Hence, a firm will always be the first to come up with proactive moves in terms of its products and beat other competitors (Miller, 1983). Being proactive implies behaviors that can

be interpreted as taking the lead vis-à-vis competitors and perceived business opportunities (James, et al., 2015). Meanwhile, Covin and Slevin (1989) related proactiveness to aggressive action toward competitors when trying to gain or maintain competitive advantage. In a similar way Lumpkin and Dess (2001) articulated that proactiveness exhibits characteristics of entrepreneur's leadership in the marketplace working to influence the task environment.

### **2.5.1.3 Riskiness**

Riskiness, on the other hand, concerns with bold actions by borrowing heavily, and committing considerable resources to venture into uncertain market environments (Rauch et al., 2009). It is the degree of the entrepreneurs' ability and willingness to commit large and risky resources into uncertain or unknown venture (Wang et al., 2001). Such risky investment, if succeeded, will possibly generate and yield high returns.

Entrepreneurs are generally regarded as risk takers in terms of their decision-making and business activities. Brockhaus (1980) described entrepreneurs as willing to take calculated business risks that non-entrepreneurs viewed as higher risk. Entrepreneurial behaviour involves investing a significant proportion of resources to a project prone to failure. The focus is on moderated and calculated risk-taking instead of extreme and uncontrolled risk-taking (Morris et al. 2008) but the value of the riskiness dimension is that it orients the firm towards the absorption of uncertainty as opposed to a paralyzing fear of it (Kraus, Rigtering, Hughes & Hosman, 2012).

### **2.5.2 Entrepreneurial Orientation and Nascent Venture Performance**

The link between EO and organizational performance has been studied intensively by previous researchers. The term “entrepreneurial orientation” has been used to refer to the strategy making processes and styles of firms that engage in entrepreneurial activities (Lumpkin & Dess, 2001). A study by Bolton and Lane (2012) in examining the entrepreneurial orientation agreed that the relationship between entrepreneurial orientation and venture performance has been successfully measured and has postulated inconsistent findings with the performance based on the previous studies by entrepreneurship researchers. Their findings revealed that EO entered in step two contributed 4% ( $p < .05$ ) of explained variance in business growth, 2% ( $p < .05$ ) in the number of employees, and 23% ( $p < .01$ ) in the external success evaluation in South Africa.

Entrepreneurial orientation is an important indicator for entrepreneurs to measure their successful in managing a business or as an entrepreneur. Table 2.5 below depicted the summary of previous literature on relationship between dimensions of entrepreneurial orientation with performance. Previous literature founds inconsistency of significance results. However, most studies produced the positive significant with the performance. In addition, a study by Krauss, et al. (2005) confirmed that measuring entrepreneurial orientation have a significant effect on the venture performance. In their study, the focus of study of entrepreneurial orientation is concentrate at the psychological aspect.

Table 2.5

*Previous study on relationship between entrepreneurial orientation and performance.*

| Author                  | N   | Independent Variable   | Dependent Variable  | Findings   |
|-------------------------|-----|--|---|--|
| Miller (1983)           | 50  | Innovativeness<br>Proactiveness<br>Riskiness   | Sales growth<br>Return on equity  | Sig. (+)<br>Sig. (+)   |
| Begley and Boyd (1987)  | 239 | Riskiness  | Growth<br>ROA<br>Liquidity  | Sig. (-)<br>Not Sig.<br>Sig. (-)   |
| Covin and Covin (1990)  | 143 | Competitive aggressiveness   | Financial performance   | Not Sig.   |
| Lumpkin and Dess (1997) | 52  | Proactiveness<br><br>Competitive aggressiveness  | Sales growth<br><br>Profitability<br>Financial Strength<br>Sales growth<br><br>Profitability<br>Financial Strength<br>Overall performance | Sig. (+)<br><br>Sig. (+)<br>Not Sig.<br>Sig. (-)<br><br>Sig. (+)<br>Sig. (+)<br>Sig. (+) |
| Lumpkin and Dess (2001) | 321 | Competitive aggressiveness<br>Proactiveness<br>Riskiness<br>Innovativeness                       | Sales<br><br>Profitability  | Not Sig.<br><br>Sig. (+)<br>Sig. (-)<br>Not Sig.   |
| Lindsay (2003)          | 79  | Proactiveness<br>Riskiness<br>Innovativeness<br>Proactiveness<br><br>Riskiness<br>Innovativeness | Subjective performance<br><br><br>Objective performance   | Sig. (-)<br><br><br>Sig. (-)<br>Sig. (-)<br>Sig. (+)<br><br>Not Sig.<br>Not Sig.         |
| Justin, et al., (2010)  | 92  | Entrepreneurial orientation  | Net profit  | Sig. (+)   |
| Jajali, et al., (2014)  | 150 | Entrepreneurial orientation  | Growth-profitability  | Sig. (+)   |
| James, et al., (2015)   | 105 | Entrepreneurial orientation  | Firm Growth   | Sig. (+)   |
| Deniz (2016)            | 324 | Entrepreneurial orientation  | Financial performance<br>Non-financial performance  | Sig. (+)<br>Sig. (+)   |

*Sources.* Adopted from Miller (1983), Begley and Boyd (1987), Covin and Covin (1990), Lumpkin and Dess (1997), Lumpkin and Dess (2001), Lindsay (2003), Justin, et al., (2010), Jajali, et al., (2014), James, et al., (2015), Deniz (2016)

Meanwhile, there were various findings of EO has been done in the Malaysian context of study. For example, in women entrepreneurial context, a study by Rashid and Mahmood (2016); Abdul mutalib, Arshad, Ismail & Ahmad (2015) found that all three dimensions of entrepreneurial orientation correlated with business performance in the light of Malaysian setting. Also, Teoh and Chong (2007) emphasized in their literature that in the Malaysian context of business, they highlight that the entrepreneurial orientation of women entrepreneurs is found to be an important factor to determine the success of women entrepreneur in her business. In technology based study, Arshad, Rasli, Arshad and Zain (2014) found out only four dimensions (innovativeness, proactiveness, risk-taking and competitive aggressiveness) of EO found to be significant with firm performance. In different context, a study by Nazri, Wahab & Omar (2015) found all five dimensions of entrepreneurial orientation have significant effect on takaful agent performance in Malaysia. Although there were few researchers examined the relationship of EO-performance in the malay and bumiputera context (Awang, et al., 2009; Zulkifli & Rosli, 2013; Zainol, Daud & Muhammad, 2012), there were lack of study thoroughly examined the EO-performance in nascent and emerging context. Thus, this study contributed to the current literature of EO-performance especially in Malaysian context of study.

## **2.6 Resources Acquisitions of Nascent Venture.**

The lifecycle of resources begins with its acquisition. How and when resources are acquired can play a critical role in the survival of nascent and new ventures. Before a resource can be acquired, the most fundamental problem to be solved is how to find a resource. Once a resource has been found, it can be acquired. At the nascent stage, as

ventures binded with “liability of newness”, resources constraint is the major challenge for them to survive. Thus, finding assistance through various program assisted by government is another option for nascent venture to grow and survived. According to Pergulova and Angulo-Ruiz (2014), the availability of resources is a criterion to engage in experimentation, risk-taking and innovation. Thus, through enhancing the ability of new firms to access financial resources, government support programmes can affect ventures developments which leads to competitive advantage. Government financial support through loans and equity, business consultation and guidance can allow new ventures not only to accumulate assets (Honjo and Harada 2006) and to obtain access to critical resources (e.g. technology, licenses and equipment), but also to invest in internal firm processes such as employee training, and in activities that would bring market acceptance such as building a brand name and unique product designs (marketing-related intangible assets). Those can affect positively product quality and innovation, and subsequently customer satisfaction and sales (Vadnjal, 2011).

On the other hand, the availability of internet creates the opportunity for nascent and new business to grow wider. The rapid growth of social media, websites, and business applications helps entrepreneurs in their business development. New social networking and social media technologies are widely believed to offer business and governmental organizations a powerful means to improve their communications, processes and ultimately, performance. Previous studies of business and technology journals are especially optimistic about the positive impacts that these technologies will have on the organizations that adopt them (Jones, 2010; Shashi, 2012). But these potential benefits are not well understood, partly due to the lack of empirical research on organizations' use of the technologies and platforms that underlie social networking and social media.

In resources-based view theory, the creation of firm-specific resources and capabilities that have the potential to bring competitive advantage is a process in which new firms combine diverse resources available to them (Barney 1991; Newbert 2007). The success of nascent ventures may be depending on government assistance. As the main challenges of nascent ventures is tied with the liability of newness, having support from government may helps entrepreneurs in the emerging stage to acquire their firm resources. Pergulova and Angulo-Ruiz (2014) agreed that government support is viewed as firm resources where it measures work their way via the development of unique resources and capabilities that enhance companies' competitive advantage. According to Barney (1991a), firm resources include all assets, capabilities, organizational processes, venture attributes, information, knowledge which are controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness.

Resources also can be classified as financial, physical, human, technological and organizational (Grant, 1991) while Wernerfelt (1984) claimed that a resource is meant anything which could be thought of as strength or weakness of a given venture. Through the definition given, online social networking also was classified as firm resources. Many researchers have studied the usage of online social networking as firm resources to understand how it confers a firm sustained competitive advantage. Among the many capabilities that social networking has been shown to confer are cocreation (Prahalad & Ramaswamy, 2004), collaboration and innovation (McAfee, 2009), better interactions (Beardsley, Johnson, & Manyika, 2006), relationship building and knowledge management. In this section, detailed discussions on government assistance



program and online social networking as firm resources and as moderating variables for this study will comprehend the lack of discussions on resource acquisition area of nascent ventures in previous studies.

## **2.7 Government assistance program**

Government influences and supports for entrepreneurship is very crucial to promote the entrepreneurial development to guarantee SMEs future venture success. The government often provides entrepreneurs assistance in the form of free information, skills and technical assistance including financial assistance. However, financial assistance or grants tends to be reserved for non-profit organizations, social services, educational endeavors and specified research. When seeking government grants for small business, it's imperative to understand the requirements to qualify for government assistance. The support from government including financial and non-financial assistance is another critical strategy for entrepreneurs in nascent venture increased their survival rates. Vadnjal (2011) stressed out that the importance of government program for new venture creation to achieve growth and success is extensively discussed in the textbook. However, the effectiveness of government assistance program has been so far neglected and poorly demonstrated by academic research (Lambrect & Pirnav, 2005). There is an ongoing debate among policy makers, practitioners and academics on the necessity for provision of low-cost business services for start-ups which would be available in the local environment (Rusten *et al.*, 2005) in which businesses operate. However, this debate is influenced more by individuals' beliefs than significant academic findings (Vadnjal, 2011).

### **2.7.1 The Roles of Government in Supporting Nascent Venture Entrepreneurs.**

For most nascent and new entrepreneurs, skills and resources are the two important elements for them to keep their nascent venture growing and survive. According to Yusuf (2012), “The entrepreneurial process involves obtaining and marshaling resources from both internal and external sources. Low capability in facing scarce internal resources such as human capital and financial capital pose a significant challenge to new entrepreneurs especially those who are in start-up effort” (p.166). Malaysian government has provided two forms of assistance; financial assistance and business support services. Accordingly, establishment of an appropriate support to entrepreneurship and small business by governments should be one of the key priorities. The assistance programs created by government aimed to enhance the business environment for domestic and foreign investment and supporting entrepreneurship, to promote entrepreneurship and to assist new entrepreneurs facing the challenges in business. Therefore, for a government with conjoint agencies, designing a comprehensive, coherent and consistent assistance programs for entrepreneurs is an absolute priority. In tandem with the current technology, the used of internet has benefiting most government ministries and agencies to interact and collaborate with the community. This proactive action has taken by government and other agencies in disseminating the available information regarding assistance programs to entrepreneurs through the various channels like social media. This effort proved that Malaysian government is concerned on the challenges faced by most entrepreneurs.

Micro-business activities or SMEs (small-medium enterprises) are the major players of Malaysian economies. The development of economics in Malaysia are driven from the contribution of SMEs where in the early 1970s, government introduced NEP (new

economic policy) in 1971. The purposed of NEP is to reduce socioeconomics disparity among races in the country and to eradicate poverty amongst Bumiputera by encouraging the ownership of businesses. In addition, entrepreneurship not only contributed the economic growth, also plays a pivotal role in generating creative and innovation community, diversity, increase competitiveness and create new opportunities by engendering new ideas to help economies better (Syed Zambri & Xavier, 2011; Gurol & Atsan, 2006; Robson & Bennett, 2000).

The development of SME further can be seen in the IMP (industrial master plan) in the 2005 and continued with the third IMP which covers from 2006-2020. This plan was executed to correspond with the country's vision for 2020 (MITI, 2005). More to the point, the ETP (Economic Transformation Programme) has been introduced by Malaysia Prime Minister recently as an inclusive effort that will lead Malaysia into a high-income nation by 2020. In strengthening the economic growth of Malaysia, government has taken numerous proactive approaches to thrive the entrepreneurship development. As the entrepreneurship is the biggest contribution for economic growth, various training and support programs are available to fulfill the needs of entrepreneurs in nascent venture.

There is a strong intent by government to create entrepreneurs not only by removing the traditional barriers to boost the entrepreneurial activity. Also, the continuous government assistance programs by providing various incentives for entrepreneurs to be competitive in the domestic and global market through the collaborating agencies including universities, government agencies and NGOs (Non-Government Organizations). The government effort in strengthening Malaysian new entrepreneurs

also can be seen through the implementation of 1MeT (1 Malaysian Entrepreneurs) which are focused on young, nascent and new entrepreneurs who are involved in business and the existence of MaGic (Malaysian Global Innovation and Creativity Centre) to monitor the entrepreneur's development.

In fact, with the collaboration with the few universities like USM, UKM and UUM the incubation program and entrepreneurship education were aimed to produce new potential of nascent entrepreneurs in Malaysia. The partnership with the various ministries in providing business advisory support and government support programs are another exertion done by government in helping nascent entrepreneurs for them to strengthen their nascent venture. Ramayah and Harun (2005) stated in their study there were 12 ministries and 40 governmental agencies jointly sustaining and promoting entrepreneurship.

Apparently, assistance programmes were employed to equip the entrepreneurs of nascent venture with the necessary skills and values such as the skills, leadership and entrepreneur programme. According to study by Chan, Selvadurai and Hamid (2009, p.55) they stated, "prominent governmental actors such as the Ministry of Youth and Sports Malaysia and The Institute of Youth Development Research Malaysia or IPPBM (Institut Penyelidikan Pembangunan Belia Malaysia) organise various programmes, training, research and other activities pertaining to youth development, for example entrepreneurship". This evidence demonstrates government has given serious attention on the entrepreneur's development especially youth, in cultivating the growth of entrepreneurship in Malaysia.

The presentation by Prime Minister of Malaysia, Dato' Seri Mohd Najib Tun Razak in Malaysian Budget 2014, government has focused on the entrepreneurs' development by emphasizing more on the generating ideas of entrepreneurs, their competencies also their strategies in venturing a business. In his speech;

An entrepreneur development plan will be formulated to provide a conducive ecosystem which emphasises the generation of ideas which can be commercialised, infrastructure for training and incubators, entrepreneurship modules, financing facilities as well as marketing. To formulate the entrepreneur development plan, an entity called the National Entrepreneur Development Office will be established under the National Strategy Unit, Ministry of Finance which will plan and coordinate all activities related to entrepreneurship.

(Najib Tun Razak, 25,2013: speech excerpts)

To strengthen entrepreneurs' development in Malaysia, Government Malaysia has allocated RM50 millions to monitor the performance of entrepreneurs by providing a one stop centre called MaGic (Malaysian Global Innovation and Creativity Centre). The establishment of MaGic is to empower entrepreneurs by monitoring the performance of entrepreneurs; house an integrated database; provide incubators; registration and patenting of intellectual property; funding facilities; business matching process; and guidance, counseling and training.

Since the rate of nascent entrepreneurs still in a worry stage (Yusoff & Yaacob, 2010; Yusuf, 2012; Shanmugam, 2013, Jusoh, et al., 2012; Zainol & Ayadurai, 2010), Malaysian government show a serious concern of this matter by implementing 1Malaysia Entrepreneurs (1MeT) programs to expose entrepreneurship to youth and new entrepreneurs. In this program, 5000 young entrepreneurs are targeted to be trained yearly. On the other hand, government has allocated another RM50 millions under

Graduate Entrepreneurship Fund managed by SME bank to encouraged graduates join the venture upon graduation. The graduates who want to open new venture may register under 1Malaysia Entrepreneur (1MeT) and received business guidance and trainings under MaGic as well as applying for financial fund under GEF (Graduate Entrepreneurship Fund). This linked showed how serious government providing business assistance for entrepreneurs especially nascent and new entrepreneurs in Malaysia.

### **2.7.2 Types of Government Assistance Program**

It is recognized that the government assistance program is vital for the development of the micro, small and medium enterprise development. Being prime movers to SMEs development and handing their first supporting role in accelerating SMEs growth, the Malaysian government have offered various business assistance programs to Malaysian entrepreneurs in ensuring their competitiveness. Generally, the assistance programs come in the form of two types which are financial assistance and non-financial assistance.

In Malaysia, PUNB (Perbadanan Usahawan Nasional berhad) and MARA (Majlis Amanah Rakyat) are known as among of the active agencies in aiding nascent entrepreneurs. Another participating agency which is helped government to create entrepreneurs is National Institute of Entrepreneurship or known as INSKEN (Institut Keusahawanan Negara). Abdullah and Manan (2009) listed the participating agencies where the nascent entrepreneurs can access for loans, grants, and venture capital financing are channeled in Table 2.6.

Table 2.6

*Types of government financial assistance programs and participating agencies in Malaysia*

| Type of venture capital financing  | Participating agencies   |
|------------------------------------|--|
| Loans, grants and equity financing | Bank Negara Malaysia (BNM), the Development Financial Institutions (DFIs), Credit Guarantee Corporation (CGC), Majlis Amanah Rakyat (MARA), Perbadanan Usahawan Nasional Berhad (PUNB), Perbadanan Nasional Berhad (PNS), Malaysia Debt Venture Berhad (MDV), Malaysian External Trade Development Corporation (MATRADE), Malaysian Biotechnology Corporation Berhad (MBC), Malaysian Technology Development Corporation (MTDC), Multimedia Development Corporation (MDeC), MIMOS Berhad (MIMOS), Malaysian Industrial Development Finance Berhad (MIDF) and Small Medium Industries Development Corporation (SMIDEC). |
| Micro-credit schemes               | Bank Simpanan Nasional (BSN), Bank Pertanian Malaysia (BPM), Yayasan Tekun Nasional (YTN), Amanah Ikhtiar Malaysia (AIM).  |

*Source.* Adopted from Abdullah and Manan (2009).

These agencies offer various programs to nascent entrepreneurs not only in terms of financial assistance, also the business support services which are helped nascent entrepreneurs in term of their survival rate and performance of the firm. Appendix D describes detailed on these three agencies meanwhile, appendix E depicts the financial assistance and non-financial assistance offer in INSKEN, PUNB, and MARA.

### 2.7.3 Government Assistance Program and Nascent Venture Development

Previous studies on the relationship between government assistance program and venture performance found inconsistent result. Previous studies found a positive relationship between the usage of business assistance by entrepreneurs with the growth of venture (Berry & Sweating, 2006; Chrisman, et al., 2012; Jones & Parry, 2011; Yusuf, 2012). In the study of Yusuf (2012), she found in her study that the probability

the use of assistance programs increases for entrepreneurs who are more educated, have more entrepreneurial experience, have relied extensively on their start-up teams, and have larger personal networks. On the other hand, the probability of use decreases as the entrepreneur has more experience working for a parents' business and the start-up team is more experienced. Jones and Parry (2011) also support the previous study where they found that the support by government is adequate and to be useful for technology entrepreneurs.

However, a study done by Maggioni, Sorrentino and Williams (1999) reported that government assistance for new ventures did not significantly affect the growth of ventures but does affect the survival given the ventures is not fully efficient in doing business. Meanwhile, Oh, Lee, Heshmati and Choi (2009) emphasized the research on government assistance in terms of credit guarantees influenced (CGI). Their result yielded the CGI only significant in maintaining firms' size and their survival rate, but has no impact on the productivity growth. Different findings in study Wren and Storey (2002) where the assistance has no impact on the survival of small enterprise, but the assistance has significant effect on sales for mid range SMEs. Another unique finding from previous studies also revealed the assistance has no significant impact on growth, but has been increased the employment rate and survival rate (Rotger, Gortz & Storey, 2012; Mole, Roper, Hart & Saal, 2009; 2011).

In the Malaysian context of study, Moha Asri (1997) has discussed briefly about government support on SME in the book chapter. While in the journal publications, most of the study of government support programs concerned on the awareness of support programs rather than its' effectiveness (Khairudin, 2007; Mustafa, Khairudin



& Sha'ri, 2006; Salleh & Ndubisi, 2006; Hakimin, et al., 2009; Hakimin, et al., 2010).

In another study conducted by Foziah, Aziz and Sudin (2006) on the usage of the governmental financial support services among small businesses in the northern part of Malaysia, the finding postulates small businesses decided to ask for financial aids from banks and other private funding institutions rather than the government support agencies. Their ignorance about the services and government bureaucracy were considered as common contributing factors to the SMEs business catastrophe.

## **2.8 The emergence of Web 2.0 in nascent venture development**

With the advancement of technology, entrepreneurs are facing the huge challenges in running the businesses. In fact, getting new ventures started up already give the risk for entrepreneurs to be able selling their product in markets. Many entrepreneurs fail in the early stages of development. Gilmore (2011) viewed an entrepreneur is a person who manages and may have started the ventures by themselves, running the venture operation in daily basis, they should not only know how to plan their venture, also competent to do marketing with the resource's constraint. The early stage entrepreneurs need to embrace themselves by being innovation in finding best solutions to countenance resources constraint.

The dimension of collaborating with the customer is widening where the existence of web 2.0 has offered the easiest way for entrepreneurs to connect with the customers. The online social networking, a component of web 2.0 becomes the first medium for entrepreneurs who decided to venture in online business interactively and cost effectively. The changed of buying behavior from customer also gives a collision to the

development of entrepreneurship. The availability of web 2.0 is another gate for e-commerce to evolve. While the e-commerce has not yet taken place in most Malaysian entrepreneurs, the transition of web 2.0 is continued to positively influence the e-commerce growth (MOSTI, 2011).

### **2.8.1 Definition of web 2.0**

There were a growing number of web 2.0 definitions by various researchers. However, the first definition come out from Tim O'Reilly in his introductory paper titled "What is Web 2.0?". Consistent with O'Reilly (2005) definition, White and Pauxtis (2010) defined web 2.0 as;

A platform, spanning all connected devices; Web 2.0 applications are those that make the most of intrinsic advantages of that platform: delivering software as a continually-updated service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an "architecture of participation", and going beyond the page metaphor of web 1.0 to deliver user experiences (p.2).

Web 2.0 is a concept of using internet for collaboration and communication in new, effective, fun and interesting way (White & Pauxtis, 2010). While the researchers in the report prepared by MOSTI (Ministry of Science, Technology and Innovation) defined the term of web 2.0 as a web application that facilitate interactive information sharing, interoperability, user-centered design, and collaboration on the WWW (World Wide Web) (MOSTI,2011). Web 2.0 also allows users to interact with each other as contributors to the website's content.

The usability of web 2.0 technologies is built on the availability of broadband or the high speed of internet access. Seeing the importance of web 2.0 benefiting businesses,

our government also takes the proactive action in restructuring the policy of the high speed of internet access by implementing HSBB (High Speed Broadband) project where Malaysian government has signed a PPP (Public Private Partnership) agreement with TM (Telekom Malaysia Berhad) to roll out high speed broadband infrastructure (MCMC, 2014) at selected areas under the project of NBI (National Broadband Initiative). The availability of internet access increased the business opportunity for entrepreneurs. The major components of web 2.0 are;

- social networking
- blogs, logging and RSS feeds
- wikis
- collaboration and virtual teams
- media

The web 2.0 has given for entrepreneurs' new business tools to boosts their performance and productivity. This new method of communication and collaboration are changing the way of business operated (White & Pauxtis, 2010). The raise of internet has driven new phenomenon in most of business ventures today. The evolving of web 2.0 from web 1.0 has changed the landscape of business as well as the rise of new generation in entrepreneurship. Social networking websites (SNWs) have developed as an increasingly influential media platform in web 2.0. Malaysians is enthusiastic adopters of social networking sites. This has been proved by the study from comScore (2011), where the report found that social networking accounted for one third of all time spent online in Malaysia in August 2011 which has placed Malaysian as the top online activity for the market. Table 2.7 shows the share of top online categories spent by Malaysian users.

Table 2.7  
Online categories by share of total minutes spent by Malaysian internet user.

| Types of social networking accounts | % share of total online per minutes |
|-------------------------------------|-------------------------------------|
| Social Networking                   | 32.1                                |
| Entertainment                       | 11.5                                |
| Portals                             | 11.0                                |
| Instant Messenger                   | 5.3                                 |
| E-mail                              | 4.2                                 |
| Total Share                         | 100                                 |

*Note.* Adopted from comScore, Inc. “Social Networking Accounts for One Third of All Time Spent Online in Malaysia”, retrieved from <http://www.comscore.com>.

The increment in the social networking activities also emanates from the increment in Malaysian internet penetration. Table 2.8 shows the internet penetration of Malaysian internet users which has been reported by Economist Intelligence Unit.

Table 2.8  
*Malaysian Internet Penetration*

|                                       | 2008 <sup>a</sup> | 2009 <sup>b</sup> | 2010 <sup>b</sup> | 2011 <sup>c</sup> | 2012 <sup>c</sup> | 2013 <sup>c</sup> |
|---------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Internet users ('000)                 | 15,074            | 15,304            | 16,100            | 17,723            | 19,055            | 20,194            |
| Internet penetration (per 100 people) | 54.7%             | 54.9%             | 57.0%             | 61.9%             | 65.7%             | 68.8%             |

*Note.* <sup>a</sup> Actual, <sup>b</sup> Economist Intelligence Unit estimates, <sup>c</sup> Economist Intelligence Unit forecast. Adopted from ITU; Economist Intelligence Unit “Malaysia internet: Sub-sector update”.

With regards statistics, and as the internet grown into a vast net of services which offering a wide range of services, from communicating, seeking information and doing business online, it has grown into a necessity in everyday lives. Ishak (2010) claimed while internet comes out with sophisticated services, it does inspired entrepreneurs to use internets not only for seeking information and it can be used to connect with other people for the commercialization purposes.

## 2.8.2 The benefit of web 2.0 for entrepreneurs

As stated by Economist Intelligence Unit (2010), Malaysia is ranked 36<sup>th</sup> out of the 70 countries surveyed in the 2010 e-readiness ranking. This ranking measure how conducive a country's market is to Internet-based opportunities. The e-readiness ranking is measured by several factors, ranging from the quality of information and communication technology infrastructure in a country to the ambition of government initiatives and the degree to which the Internet is improving commercial efficiency. The researcher of Economist Intelligence Unit suggesting that government of Malaysian government is doing an effective job of providing the better infrastructure and investment climate for the country to succeed in its ICT development. Through this succeed, Malaysia received a score of 5.93 out of 10 in the 2010 rankings and was rated as moderately high in the business environment category (Economist Intelligence Unit, 2010).

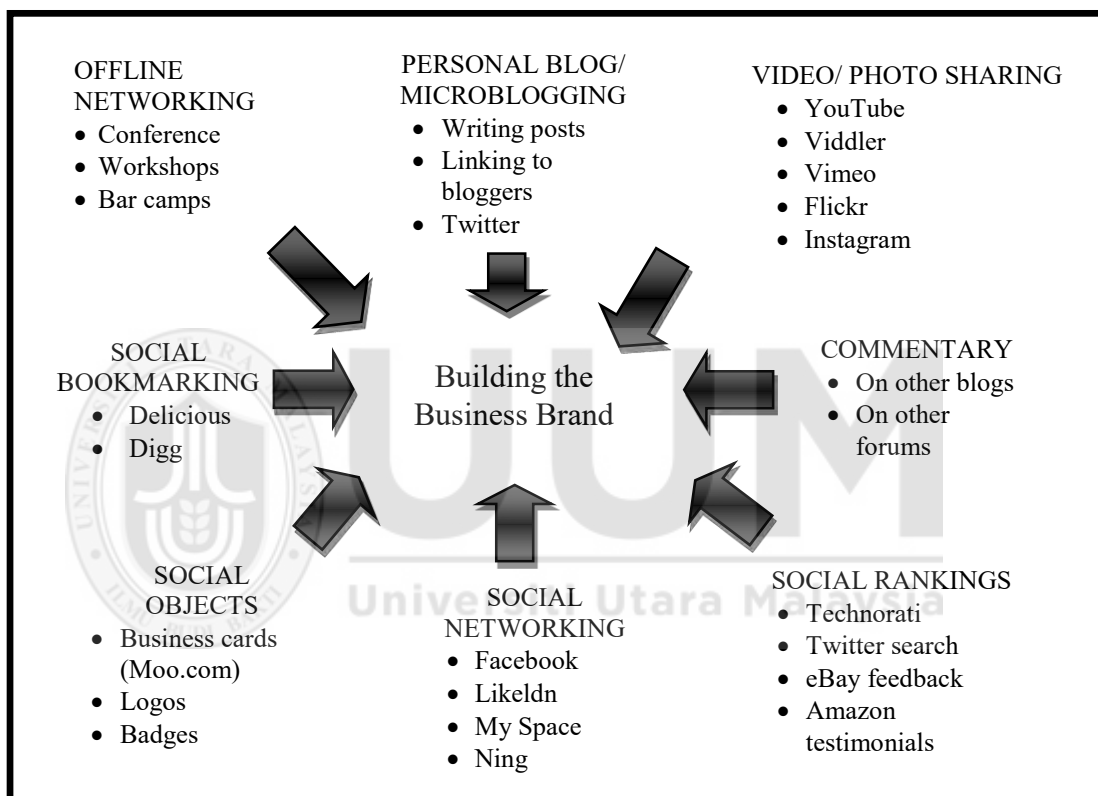
It has been identified as the most accessible place to do online shopping for most Malaysian is facebook. However, most facebook subscribers who are interested in doing online business are only acted as a business agent or distributor of a product. A recent SME survey by the Associated Chinese Chambers of Commerce and Industry of Malaysia (ACCCIM, 2012), found only 28 percent out of 965 survey Malaysian small-medium enterprises respondents has e-commerce as part of their core business strategy especially in marketing strategy. On the other hand, the ACCCIM survey has reported that 36 percent of the small-medium enterprises have a public profile on social networking websites. Thus, these reported represented the small uptake of social networking usage among Malaysian entrepreneurs.

According to ICT Strategic Review E-Commerce for Global Reach Report 2011, the entrepreneurs is encouraged to optimize the use of web 2.0 and incorporated the functionality that helps them deliver the experience sought by their customer base and allowing for greater customer feedback. The technology of web 2.0 is available to help create online brand immersion, increase customer loyalty and drive repeat sales (MOSTI, 2011). Most of the researchers also agreed with the report where Burrus (2010) claims that web 2.0 adopted by innovative companies are to “embrace as a way to enhance communication, information sharing and collaboration, thereby allowing them to implement many innovative even radical business practices (p.50)”.

As discussed earlier, one of the components Web 2.0 is social networking. The social networking and social media also have been touched in the chapter one of this study. The usage of social networking for business is merely as a tool to enhance the development of the business itself. The study done by previous researchers agree that web 2.0 has changed the way of small business manage and maintain their business relationship with customers and stakeholders (Jones, 2010; Harris & Rae, 2011; Sashi, 2012; Harris, Rae & Misner, 2012; Barnes, et al., 2012). Besides of creating strong customer engagement and stakeholders’ relationship, the tools of web 2.0 also are benefiting entrepreneurs in terms of branding.

The growing importance of social networking as a tool of Web 2.0 to business branding has been well documented by previous researcher (Bhargava, 2008; Harris & Rae, 2011). Harris and Rae (2011) defined the brand through the work of Olins (2003), a brand is, “a symbolic embodiment of all the information connected to a company, product or service” (p.16). To build a business brand is critical for many businesses.

While maintaining the business brand gives the challenges for entrepreneurs, to create brand awareness among the customers also is another challenge to be considered. Therefore, the use of Web 2.0 gives an imperative way for business to grasp the opportunity in building their brand more effectively and efficiently. Figure 2.5 below exemplifies how Web 2.0 tools are used for business branding.



*Figure 2.5.* The usage of web 2.0 tools in building the business brand adopted from Harris and Rae (2011).

In addition, Web 2.0 also introduced the effective ways to do marketing for entrepreneurs especially for the businesses which decided to have low cost of advertising and promotion (Jones, 2010; Shashi, 2012). Nevertheless, the usage of Web 2.0 emphasized the use of social networking not limited to B2C (business to customer) business model only, but the usability is expanded to B2B (business to business) business model (MOSTI, 2011). Jones (2010, p.145, 146) again summarized the used

of Web 2.0 for businesses as to promote business offerings; to communicate with publics and stakeholders; to distribute products, services, knowledge and communications; to brand their business, products and services; to segment, target and position their products and services; to differentiate their offerings from their competitors; to raise the profile; to research and better understand the markets in which they operate; to generate trade with other businesses; to create customer interest; to co-create value of business; to advance the cause of procurers; to crowd source; and to gather customer feedback.

### **2.8.3 Opportunities for entrepreneurs in using online social networking**

Entrepreneurs of nascent venture are characterized as a new entity in business market, having new product or service, lack of skill and experience, low of fund and resources and low of business credibility. Young graduates who are decided to be entrepreneurs and already venturing a business are the group called “nascent entrepreneurs” (Long, et al., 2010). Young and new ventures constantly facing with the challenges of capital constraint in their early stage of entrepreneurial process (Stel, et al., 2003; Wu, et al., 2007; Kropp, et al., 2008; Kwong, et al., 2009; Yusuf, 2010). Because of this challenge, there is a need for them to find a solution in managing the capital constraints when starting a venture. One of the ways to reduce the cost especially in advertising and maintaining the customer relationship is through the adoption of social networking site. The social networking site is the imperative features in Web 2.0.

The recent study acknowledged the benefit of Web 2.0 is not for large and established venture only, new starts-up and small medium venture also is vital for them to use Web 2.0 to acquire information for their survival and growth. Jones (2010) believed Web 2.0



is helping entrepreneurs of nascent ventures through delivering higher value experience to customers and suppliers, a place for market research whereby to collect and store information on customers, competitors, suppliers and employees. Web 2.0 also can be used to gather feedback from customers and the good Web 2.0 also can help support customer loyalty and retention. While the usage of Web 2.0 incurred lowered cost compared to other business tools, this benefiting entrepreneurs especially nascent who are still struggling in their financial capital.

A tool of Web 2.0, social networking in business gives a big impact to entrepreneurs especially the beginners in targeting their customers. In fact, the new wave of technology enables connectivity and interactivity of individuals and group through computers and mobile phones, low cost internet and open source like Wi-Fi. The availability of various social networks also has enabled the growth of social networking sites like Facebook, twitter, likeldn, my space, blogger and others (Brown, Broderick, & Lee, 2007; Smith, Coyle, Lightfoot, & Jun 2007; Vilpponen, Winter, & Sundqvist, 2006). The most popular social website which increased the level of networking is Facebook, twitter, my space and blogging. A usage of social networking sites in business also initiates the new strategies for nascent entrepreneurs enhancing the new way of marketing and enhancing their ventures development.

#### **2.8.4 Adoption of Online Social Networking Sites and characteristics of adoption**

The raise of internet paradigm has increased the ability to socialize and increased the networking of the people. According to Li (2010), "...with the proliferation of Web 2.0 technologies, there has been a remarkable growth of the number of people participating in online social networking (p.562)". In fact, SNWs (social networking web sites) such

as Facebook, Orkut, Youtube, Flickr, Twitter, and others have gained wide acceptance amongst internet users (Kaplan and Haenlein, 2010). From Pillai and Mukherjee (2011) through Boyd and Ellison (2007), they defined social networking as;

[. . .] web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site (p. 210).

Using social networking or social media effectively is still elusive for many entrepreneurs. For the past 10 years, many management books have focused on customer-centricity. In addition, social networking also can be formed as a platform that is easily accessible to anyone with internet (Zyl, 2009), opening doors for organizations to increase their brand awareness (Kotler, et al., 2010) and facilitate conversations with the customers (Boyd, 2006; Gorge, 2007). Mc Nealy (2010) pointed out that social networking is one of the mediums designed to be distributed through social interaction, thus this type of mainstream media like television, radio and newspaper perceived as no longer access to publishing and distribution. He also added that by using social networking a new platform to market the products; entrepreneurs may save their cost of operating. Bolotaeva and Cata (2010) indeed supported by explained social networking may offers an inexpensive internet marketing tool. The proportion of cost effectiveness again augmented by Zyl (2009) where;

The advent of computer networks and the internet has made it possible for group interaction to take place regardless of geographic location or time zone, and the subsequent incorporation of these network technologies has made this interaction and co-operation more fluid, cost effective and easily maintained (p.908).

The study of entrepreneurship has increasingly reflected the general agreement that entrepreneurs of nascent ventures must engage in networks to survive (Huggins 2000).

Within the social network hypothesis of entrepreneurship research, a number of quantitative analyses have been undertaken and models developed accordingly. The main sources of data have been enterprises in advanced economies in North America and Europe (Kristiansen, 2004). Most studies of relations between social networks and entrepreneurship assume that networking gives access to corresponding resources, which could also include motivation, initiatives, and the basic ideas of a new business. It is also generally accepted in the literature that the socioeconomic environment in which entrepreneurs operate will influence their ability to access the benefits of economic efficiency which networks facilitate (Szarka 1990).

Table 2.9  
*Types of technologies offered by Web 2.0*

| Technology         | Description  |
|--------------------|--|
| Blogging           | Blogs are self-publishing tool that resembles online journals where an owner can periodically post messages. Readers can subscribe to a blog, link to it, share links and post comments in an interactive format and indicate their social relationship to other bloggers who read particular blog.  |
| Micro-blogging     | Microblogging is a web service that allows the subscriber to broadcast short messages to other subscribers of the service. Microposts can be made public on a Web site and/or distributed to a private group of subscribers. Subscribers can read microblog posts online or request that updates be delivered in real time to their desktop as an instant message or sent to a mobile device as an SMS text message. |
| Social bookmarking | Social bookmarking allows users to post their lists of bookmarks or favourite websites for other users to search and view.   |
| Tagging            | Tagging is the use of key words to track content on websites. It can be used as a form of social bookmarking, where a user can gain access to all the content identified by other users and linked to the specific key word.   |

*Sources.* Adapted from ClearSwift (2007a, b); Godwin-Jones (2006); Matsuzak (2007).

Table 2.9 above summarizes the more popular technologies which are relevant to social networking. This table emphasizes the nature of social networking technologies which it focuses on online collaboration and sharing of mainly user-generated content

(ClearSwift, 2007a, 2007b; O'Reilly, 2005). Due to the nature of current technologies, it is easily adopted by users as a tool to aid social networking in the virtual world (Zyl, 2009). The usage of online social networking in business has been recognized not only in the entrepreneurship, also in the academic research. The previous study done in qualitative method found the integrative of new website approach found that the entrepreneurs are appreciated to utilize the online features for their business purposes (McGowan, Durkin, Allen, Dougen & Nixon, 2001). They agreed that this technology is important to the business in a way of;

- information gathering and provision;
- improved lower cost communication;
- expansion of markets;
- relationship building and management;
- promotion and improved image;
- and competitive advantage.

Witt (2004) emphasized that applying social network is vital for entrepreneurs to develop their network in order to increase their business knowledge, resources and lead to the growth. However, Hung (2006, p. 369) viewed the social network adoption by new firm as “the transition from depending on entrepreneurs’ interpersonal networks to consolidating the embeddedness in the inter-organizational networks of the new venture is critical for its continued survival”. Thus, it is important for entrepreneurs in nascent venture to broaden their network.

### **2.8.5 Unified Theory of Acceptance and Use of Technology (UTAUT)**

After the development of TAM theory as discussed in appendix F, Venkatesh et al. (2003) again come with the detailed theory in probing the influence factors of user acceptance technology. Thus, a unified theory of acceptance and use of technology (UTAUT) theory was developed by them. The UTAUT theory consists of eight theoretical models. They are; the theory of reasoned action (Davis et al. 1989), the technology acceptance model (Davis, 1989), the motivational model (Davis et al., 1992), the theory of planned behaviour (Ajzen, 1991), a model combining the technology acceptance model and the theory of planned behaviour (Taylor & Todd 1995), the model of PC utilization (Thompson et al., 1991), the innovation diffusion theory (Rogers, 1995), and social cognitive theory (Compeau & Higgins, 1995).

The theory of UTAUT holds four key constructs (performance expectancy, effort expectancy, social influence, and facilitating conditions) which are direct determinants of usage intention and behaviors (Al-Syafi & Weerakkody, 2009). Also, UTAUT posits the role of four key moderator variables (Age, Gender, Experience, and Voluntariness of use). Moreover, UTAUT model has been found to be preferred to the above-mentioned theoretical models as it is able to account for a high percentage of the variance ( $R^2$ ) in usage intention (Venkatesh et al., 2003). Additionally, the UTAUT theory drove the social influence and others contingent factors in explaining adoption and acceptance behavior. In difference, social influence which derived from subjective norms is an important determinant of user intention (Zhou, 2011). For the proposed framework, social influence is a proposed determinant for the study.

UTAUT takes into consideration various aspects of user acceptance like technology, motivation, utilization, innovation, societal aspects, etc. (Venkatesh et al., 2003). In fact, Pillai and Mukherjee (2011) pointed out in deciding to use social networking websites; it does involve a variety of factors incorporated in the UTAUT theory especially societal aspects and utilization. There has been limited discussion of UTAUT theory in social networking websites, as suggested by Pillai and Mukherjee (2011) UTAUT will gives different emphasizes in observing the users' behavior on social networking adoption. Below are the dimensions of online social networking deriving from UTAUT.

1. *Performance Expectancy (PE)*. Performance Expectancy (PE) refers to the degree to which an individual believes that using a particular system will enhance his/her work performance (Hung et al., 2007; Venkatesh et al., 2003). According to literatures, PE is a strong predictor of user intention in the information and communication technology context (Davis et al., 1992; 2003; Naor & Geri, 2008; Taylor & Todd, 2001; Venkatesh & Davis, 2000; Venkatesh et al., 2003).

2. *Effort Expectancy (EE)*. Effort expectancy refers to the degree of ease felt by individuals when they use the information system (Hung et al., 2007; Venkatesh et al., 2003). Several studies have indicated that the effort expectancy construct has a significant influence on behavioral intention to use an e-learning technology (Marchewk et al., 2007; Naor & Geri, 2008; Nanayakkara, 2005).

3. *Social Influence (SI)*. Social influence refers to the effect of people's points of view on individuals' use of technology (Hung et al., 2007; Venkatesh et al., 2003). The social

influence construct is adapted from three prior constructs for instance (a) subjective norms in the extended technology acceptance model (TAM2), and theory of reason action (TRA), (b) social factors in model of PC utilization (MPCU), and (c) image in diffusion of innovation theory (DOI). Social influence is a strong predictor of behavioral intention to use an information and communication technology (Dadayan & Ferro, 2004; Venkatesh & Davis, 2000; Venkatesh et al., 2003). More specifically, many literatures indicate that the social influence construct has a significant influence on user intention to use the system (Abbad et al., 2009; Marchewka et al., 2007; Shen et al., 2006).

4. *Attitude to use (ATT)*. An attitude is defined as an individual's positive or negative feeling about performing the target behavior or in this case, using online social networking applications like Facebook, Instagram, Twitter, Whatsapp, Blogs and others (Venkatesh, 2013; Fishbein & Ajzen, 1975).

#### **2.8.6 Online Social Networking Adoption and Nascent Venture Development**

The findings from previous studies have shown constructive result of social network usage for business venture. A study done by Indrupati and Henari (2012) has clearly shown that over 87 per cent of the entrepreneurs felt that their social media profiles have been helping their venture; and over 98 per cent said they believe that online social networking web sites are in fact helping all entrepreneurs. While in other recent studies, it is found that social networking usage has a positive relationship with the venture performance in the context of salesperson (Schultz, Schwepker-Jr, & Good, 2012; Onyemah, Swain & Hanna, 2010). The study on of e-tailers also, (Qu, Wang, Wang&

Zhang, 2013) they stated that making friends in online market places helps e-tailers improve their performance.

While in the banking studies, the previous researchers also found that the usage of social media and networking sites is positively helpful for them to maintain their relationship with the customers and helps the banking performance (Chikandiwa, Contogiannis, & Jembere, 2013; Mitic & Kapoulas, 2012). A study by Peltier and Naidu (2012) viewed the findings of small medium firm in using social network for business throughout the life-cycle of the ventures. The findings show that social networks for small businesses change as firm's transition from startup to growth and beyond. Personal networks were most important during startup, with other social networks growing in contact frequency and importance over time. The findings also show that small business owners can be classified along network preferences and that social networks lead superior performance.

## **2.9 Hypotheses development**

The independent variables to be studied are entrepreneurial strategies of entrepreneurial bricolage (EB) and entrepreneurial orientation (EO). These independent variables are hypothesized to have significant relationships on the dependent variable that is the nascent venture performance. This study also intends to look at resources acquisition of government assistance programs (GAP) and online social networking adoption (OSN) that is believed to moderate the relationships between the EB and EO dimensions. The EO dimensions consist of three dimensions: innovativeness, proactiveness and riskiness. This section outlines each of the research hypotheses as



specified in the proposed research framework (Figure 2.6). the discussions in subsection below is the development of hypotheses proposed for this study based on the development of research questions and research objectives in Chapter 1. The development of hypotheses for this study is reviewed from the literature reviews discussed in chapter 2 and underpinning theories in early discussions of this chapter.

### **2.9.1 Entrepreneurial strategies of entrepreneurial bricolage with nascent venture performance**

The hypothesis in this subsection were developed based on research objective 1 and detailed discussions in literature review chapter under subsection 2.4. The bricolage in entrepreneurship is an emerging theory which posits the practical strategy for emerging ventures for their survival and growth (Senyard et al., 2014; Senyard, Baker & Steffens, 2010). The concept of bricolage was enfold with the 'liability of newness' of the ventures which are characterised as a poor-resourced firm (Baker & Nelson, 2005; Varrichio et al., 2012; Kariv & Coleman, 2015).

Although this theory is scarcely studied in quantitative research, entrepreneurship researchers believed that bricolage influenced poor resourced firms to grow resulting from 'creating from nothing' (Baker, 2007; Baker et al., 2003; Senyard et al., 2011; Varrichio et al., 2012). Model developed by Gielnick and Frese (2013) as discussed in previous subsection 2.4.3 was utilized to examine the bricolage effect as an entrepreneurial strategy towards entrepreneurial success. This model was developed in the context of developing countries and can be used as a reference of evidence-based entrepreneurship concept. As the bricolage is one of the contingent factors of entrepreneurial success in Gielnik and Frese (2013) model, this model has fully support

that bricolage works with the nascent ventures, new ventures, start-up or emerging firms.

A study done by Senyard, Baker, and Davidsson (2009) revealed that entrepreneurial bricolage is positively significant with firm performance of nascent ventures, but negatively significant with firm performance of young ventures. In addition, Salunke, et al. (2013) studied the effect of bricolage on 192 projected oriented firms. Their results yielded that bricolage have significant effect on sustained competitive advantage (SCA). SCA is found to be projective factor on performance. Recent studies also found that bricolage have significant effect on performance.

In study of Gras & Nason (2014), their study emphasized on the embedded role of the 6,800-family household in governing firm performance in an impoverished setting through bricolage concept. Meanwhile, Ernst, et al. (2014) also found out that bricolage have positively effect on innovation in 215 forbes companies and the study by Wu, Liu, and Zhang (2017) exposed survey data from 222 firms resulted that bricolage hastens new-product development (NPD). Beyond that, it is argued that the insight of entrepreneurial bricolage seems particularly well fitted to analysing the ventures' entrepreneurial strategy and performance of nascent venture (Senyard, et al., 2010). With the scarce study addressed the relationship between entrepreneurial bricolage and nascent venture performance in quantitative study, hence this study is proposed the hypothesis as below;

*H1: There is significant relationship between entrepreneurial bricolage and nascent venture performance.*

### **2.9.2 Entrepreneurial strategies of entrepreneurial orientation of innovativeness, proactiveness, riskiness) with nascent venture performance**

The hypothesis in this subsection were developed based on research objective 2 and detailed discussions in literature review chapter under subsection 2.5. Wiklund and Shepherd (2005) defines entrepreneurial orientation (EO) is defined as strategic posture of a firm which captures specific aspects of the firm's decision-making styles, practices, and method, or in short, indicates a firm's overall competitive orientation (Covin & Slevin, 1989b, 1990). It has also been proved as one of the determinant factors that contribute to the business success and growth (Lumpkin & Dess, 1996). Dess et al. (1997) then further confirmed that EO is critical for the overall performance as it demonstrates the use of a combination of other new strategies to be able to get the full advantage of the available business opportunities.

In this study, EO was conceptualised as consisting of innovativeness, proactiveness and riskiness, the three dominant dimensions that are being focused by most of the EO relevant studies to explain the variance in the construct, and being considered to give a great impact in firm's growth (Miller, 1987; Lumpkin & Dess, 1996). Being described by Lumpkin and Dess, (1996) as the "willingness to support creativity and experimentation in introducing new products/services, and novelty, technological leadership and R&D in developing new processes", innovativeness is the first dimension of EO that has been employed in this study for its vitality as a core of entrepreneurship process where it refers to a tendency to engage in generating new ideas, novelty, experimentation, and creative processes. Proactiveness is the second dimension being employed and it is defined as an opportunity-seeking, forward-looking perspective involving introducing new products or services ahead of the competition

and acting in anticipation of future demand to create change and shape the environment (Lumpkin & Dess, 2001; Rauch et al., 2004). And finally, risk taking is known as a tendency to take bold actions such as venturing into unknown new markets, committing a large portion of resources to ventures with uncertain outcomes, and/or borrowing heavily (Lumpkin & Dess, 2001). That is to say, risk taking is the degree to which managers are willing to make large and risky resource commitments (Miller & Friesen, 1982).

Lumpkin and Dess (1996) conducted studies on clarifying the entrepreneurial orientation construct and linking it to performance. He suggested that EO may be more strongly related with performance when it is pooled with both the appropriate plan and the proper environmental conditions. The finding of Wiklund and Shepherd (2003) supported the previous entrepreneurial orientation literature that established positive association between entrepreneurial orientation and performance relationship. An alternate study conducted by Wang (2008) in UK among 213 medium enterprise to a vast firm in more established to examine the relationship among EO, learning orientation and business performance.

The study secures a positive relationship between entrepreneur orientation and performance. Faizol, et al., (2010) examined entrepreneurial orientation and business performance of small and medium scale enterprises in Sri Lanka. A sample of one hundred and twenty-five listed small and medium enterprises and twenty-five manufacturing SMEs selected. Both qualitative and quantitative methods were employed using multiple regressions for data analysis. The result shows a strong linkage between the two constructs. In addition, recent studies also posited that

entrepreneurial orientation of innovativeness, proactiveness and riskiness have significant effect on business performance (Jajali, et al., 2014; James, et al., 2015; Deniz, 2016). Based on the previously stated studies, the current study hypothesized that:

*H2: There is significant relationship between entrepreneurial orientation and nascent venture performance.*

*H2a: There is significant relationship between innovativeness and nascent venture performance.*

*H2b: There is significant relationship between proactiveness and nascent venture performance.*

*H2c: There is significant relationship between riskiness and nascent venture performance.*

### **2.9.3 The moderating effect of government assistance program as resources acquisition for nascent venture**

In the previous discussions on RBV theory, government assistance program has been identified as firm resources (Cauwenberge, Bauwhede & Schoojans, 2013). Grounding the theoretical model in the resource-based view and institutional theories, a study by Pergelova and Angulo-Ruiz (2014) contends to examine the government assistance as resources acquisition for business performance. Linking with the entrepreneurial success model in emerging economy by Gielnik and Frese (2013), the effect of the entrepreneurial action and strategy on entrepreneurial success was moderated by firm resources and institutional. The model explained resources was derived as financial capital (from banks, family, government), social capital, labor and human capital and infrastructure.

Entrepreneurial success model was a new model developed by Gielnik and Frese (2013) where new variable of bricolage has been tested toward entrepreneurial success in emerging economy and it was moderated by firm resources. Following the work of Gielnik and Frese (2013), this study also emphasized the role of government assistance program as moderator in the relationship between bricolage and nascent venture performance. Further, in contingency theory, Lumpkin and Dess (1996) proved that the role of moderator needed in examining the entrepreneurial orientation and performance of new ventures linkage. In the contingency theory as discussed in detail under subsection 2.11.3, the firm resources fall under the organizational context which was a moderator role for the theory. From the Lumpkin and Dess (1996) study, firm's resources found to moderate the relationship between entrepreneurial orientation and new firm performance.

On the other hand, a study by Moeljadi, Sumiati, Anselah and Yuniarsa (2015) introduced the government assistance program as a moderator variable in the entrepreneurial orientation and performance linkage. The population of their study is 1,057 of small and medium enterprises (SMEs) in the village Tutul Balung Jember District. However, only 100 SMEs were selected by Slovin method. Analysis of data using a WarpPLS, where the government's role is not proven moderate the relationship between entrepreneurial orientation, innovation, and market orientation towards business performance. The findings of this study proved that the government does not have a role in shaping the entrepreneurial spirit, because the entrepreneurial spirit has been formed in their environment and such acts are hereditary (Moeljadi, et al., 2015).

In other study, Soares, Moeljadi, Rohman and Salimun (2014) study was done to analyze and explaining effect of entrepreneurial orientation on business performance with government policy as a moderating variable. This research was conducted at capital city of Dili, Baucau and Maliana District outside 13 districts in Timor Leste. 275 SMEs from three districts (Dili, Baucau and Maliana) in Republica Democratica de Timor-Leste (Timor Leste) State were identified as the population of study. Using saturated samples, 157 questionnaires collected with response rate is 57.1% and analyzed using Generalized Structured Component Analysis (GSCA). Study result shows that government policy can not moderate effect of entrepreneurial orientation on business performance. It shows that government policy does not have direct effect and moderating effect to improve SMEs performance.

The intervention of government increased the effect of the relationship between the values of entrepreneurs, management and performance growth of SMEs (Shariff et al., 2008). In the same context, Abdullah and Hussin (2010) aimed to investigate the moderating effect of government assistance towards the improvement of business performance of turnaround companies. Analysis of logistic regression was used to investigate the effect of retrenchment and product-market refocusing strategy and the combination effect of government assistance as a moderator towards the improvement of business performance of turnaround firms. The sample consists of 135 exporter-manufacturing companies listed in the Exporter Directory of the Province of North Sumatra, Indonesia. The study found partial support in the moderating effects of government assistance and firm size and their influence in the relationship between strategy and successful turnaround. In the Malaysian context, a study done Munoz, Welsh, Chan and Raven, 2014 (2014) by postulates microenterprises did seek outside

help, but primarily from associations with other businesses in the industry. Government support was used to a lesser extent. This mirrors findings on women entrepreneurs in emerging economies that seldom utilized government support (Welsh et al. 2013a, b, c). Moreover, Vij and Bedi (2012) stressed that organizational and environmental factors should be examined for their moderating effects on the relationship between EO and performance.

Therefore, in this study, government assistance program was proposed to have a moderating impact to shed deeper insight into the EO-performance relationship. Building on this argument, government assistance program is hypothesized to moderate the EO-performance relationship. Based on discussions above, the following hypotheses are proposed;

*H3: Government assistance program moderates the relationship between entrepreneurial bricolage and nascent venture performance.*

*H4: Government assistance program moderates the relationship between entrepreneurial orientation and nascent venture performance.*

*H4a: Government assistance program moderated the relationship between innovativeness and nascent venture performance.*

*H4b: Government assistance program moderated the relationship between proactiveness and nascent venture performance.*

*H4c: Government assistance program moderated the relationship between riskiness and nascent venture performance.*



#### **2.9.4 The moderating effect of online social networking adoption as resources acquisition for nascent venture**

Similar with government assistance program, online social networking also categorized as firm resources in innovation management, where the research considers social media platforms as new open innovation intermediaries that enable firms to integrate external resources and ideas early in the innovation process and capture value produced outside the boundaries of the firm (Bria, 2013). One way of acquiring the necessary resources and capabilities to navigate the complex and uncertain business environment in transition economies is the utilization of social networking relationships and ties (Acquaah, 2012). In addition, Butler (2001) explained a resource-based theory of sustainable social networking structures is presented. Members contribute time, energy, and other resources, enabling this type social structure to provide benefits for individuals. These benefits, which include information, influence, and social support, are the basis for a social structure's ability to attract and retain members.

In the entrepreneurial success model by Gielnick and Frese (2013), they tested the moderating effect of firm resources and institutional factors in the relationship between entrepreneurial strategy and entrepreneurial success. The model explained resources was derived as financial capital (from banks, family, government), social capital, labor and human capital and infrastructure. Meanwhile, in contingency theory, Lumpkin and Dess (1996) proved that the role of moderator needed in examining the entrepreneurial orientation and performance of new ventures linkage. In the contingency theory as discussed in detail under subsection 3.1.3, the firm resources fall under the organizational context which was a moderator role for the theory. From the Lumpkin and Dess (1996) study, firm's resources found to moderate the relationship between

entrepreneurial orientation and new firm performance. The RBV theory has included online social networking as one of the firm's resources. Thus, online social networking is meant to be a moderator role in enhancing new firm's performance.

In other context of study, online social networking has been discussed its role as a moderator. In previous study, Web 2.0 and online social networking sites are of significance in a better understanding of e-Learning platform adoption (Medina & Ruffin, 2014). In their study, the paper attempts to determine the validity of the antecedents posited by Chan et al. (2010) in the field of e-Learning and the moderating role that SNS use may play in platform adoption. The influence of awareness, self-efficacy, convenience and assistance as antecedents of the components of the adoption model is determined; it is further found that SNS use has a moderating effect on the relationship between the intention to use the platform and its posited antecedents. In entrepreneurship study, Hung (2006) posited the social network adoption by new firm as the transition from depending on entrepreneurs' interpersonal networks to consolidating their embeddedness in the inter-organizational networks of the new venture is critical for them continued survival.

In other study, Kiprotich, Kimosop, Kemboi and Kiprop (2015) examined the moderating effect of social networking on the relationship between entrepreneurial orientation and performance of small and medium enterprise in Nakuru, Kenya. Utilizing the resource-based view theory (Barney 1991), a questionnaire was used to collect data from a sample of 214 SMEs in Nakuru town. Correlation and multiple regression analysis were employed to test the hypotheses. Their results indicated that Risk-taking, Pro-activeness and Innovativeness were significant in affecting

performance of SMEs. Also, the results revealed that social networking positively moderates the relationship between risk-taking and proactiveness and performance of SMEs. Kiprotich, et al., (2015) recommended that SMEs need to endeavor and embrace social networking since it offers a cost-effective way in expanding contact bases and enhancing the profitability of firm. In addition, a study by Manev, Manelova, Gyoshev and Harkins (2012) focused about the role of competitive strategies and social capital for entrepreneurial performance in Bulgaria. The study received 334 responses collected using a quota sampling approach (Neuman, 2003) with two requirements: the businesses had to be started in the past seven years and they had to have not more than 250 employees. Their study finds that both the venture's competitive strategic positioning and the founder's networking positively influence performance. The hypothesized moderating effect of networking for the relationship between differentiation strategy and performance received only tentative support. Contrary to expectations, the result postulates a negative moderating effect of networking for the relationship of cost leadership with performance. These results suggest that the entrepreneur's network plays a role in shaping how strategies influence performance by possibly upholding differentiation and deemphasizing cost leadership strategy.

Meanwhile, a study by Acquah (2011) examined the effect of business strategy on performance of family businesses and how managerial social networking relationships with external entities moderate the business strategy–performance link. Using data from 54 family firms from Ghana, the findings indicate that: (1) the pursuit of the business strategies of cost leadership and differentiation create competitive advantage for family businesses; (2) social networking relationships with government bureaucratic officials and community leaders are beneficial to family businesses, but social networking

relationships with political leaders is detrimental to family businesses; and (3) the benefit of business strategy to family businesses is moderated positively by networking with community leaders, but negatively by networking with political leaders. From above discussions, online social networking was proposed to have a moderating impact to shed deeper insight into the EO-performance relationship. Building on this argument, online social networking is hypothesized to moderate the entrepreneurial bricolage, entrepreneurial orientation and performance relationship. Based on discussions above, the following hypotheses are proposed;

*H5: Online social networking adoption moderates the relationship between entrepreneurial bricolage and nascent venture performance.*

*H6: Online social networking adoption moderates the relationship between entrepreneurial orientation and nascent venture performance.*

*H6a: Online social networking adoption moderated the relationship between innovativeness and nascent venture performance.*

*H6b: Online social networking adoption moderated the relationship between proactiveness and nascent venture performance.*

*H6c: Online social networking adoption moderated the relationship between riskiness and nascent venture performance.*

## **2.10 Research framework**

The independent variables (IV) to be studied are entrepreneurial bricolage (EB) and entrepreneurial orientation (EO) as an entrepreneurial strategy. These independent variables are hypothesized to have significant relationships on the dependent variable (DV) that is the malay-owned nascent venture performance. This study also intends to look at resources acquisition of government assistance program (GAP) and online social networkin (OSN) that is believed to moderate the relationships between the EB and EO dimensions. The EO consists of three dimensions: innovativeness, proactiveness and risk taking. This study also grounded with the underpinning theories of entrepreneurial success model by Gielnick and Frese (2013) and contingency theory by Lumpkin and Dess (1996) Figure 2.6 below presents the framework of the proposed research.

OLC theory by Robbins and Barnwell (2006) was employed to describe the emergence stage of nascent ventures. In explaining the resources acquisition of nascent venture, RBV theory by Barney (1991) postulates the research variables. Through theoretical model of entrepreneurial success by Gielnik and Frese (2013), the relationship between entrepreneurial bricolage and nascent venture performance were proposed in this framework. We used contingency theory by Lumpkin and Dess (1996) as underlying theory in explaining the relationship of entrepreneurial orientation with nascent venture performance and the moderating effect of resources acquisition between entrepreneurial strategy and nascent venture performance.

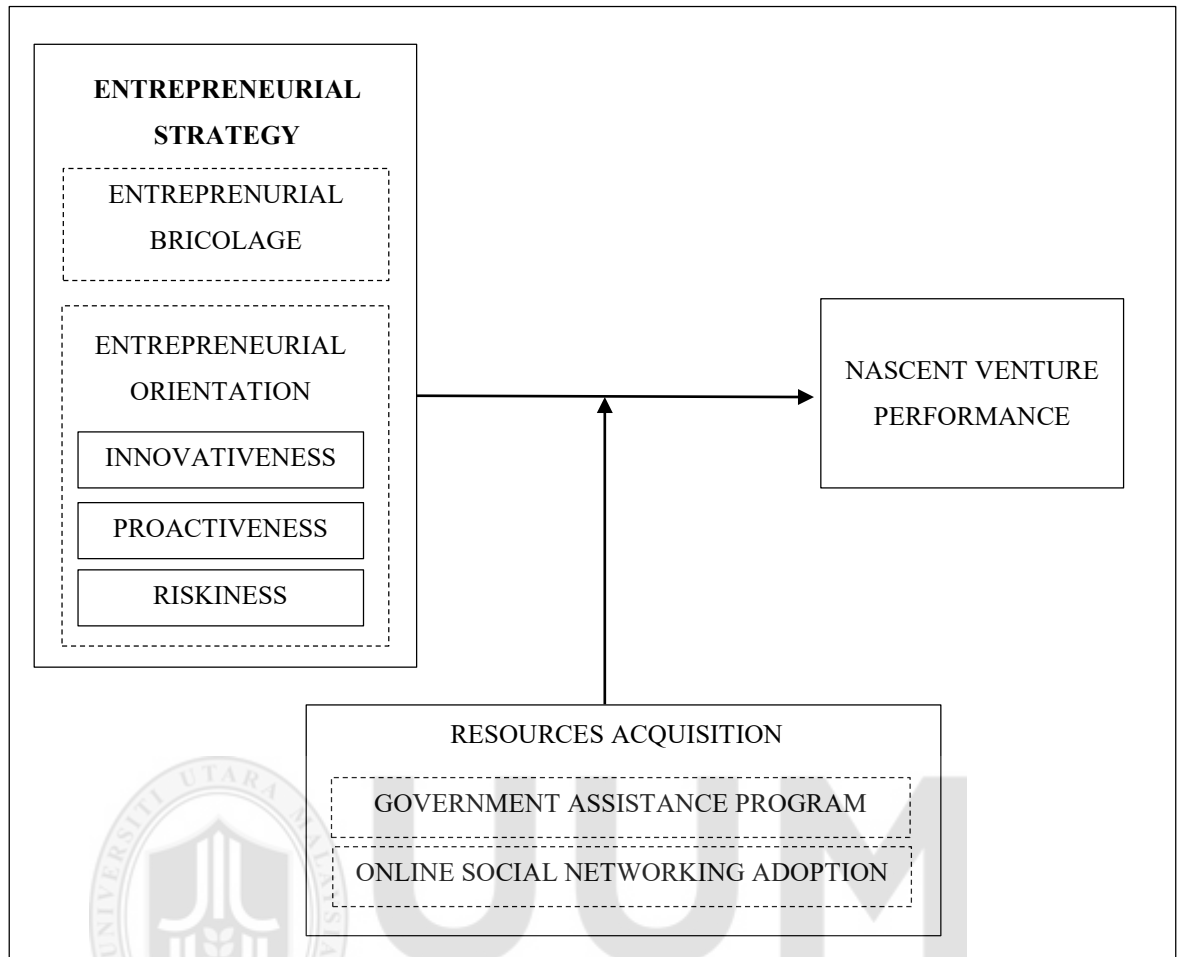


Figure 2.6. Theoretical framework of the research.

## 2.11. The Underpinning Theory

In proposing the research framework, a solid foundation laid below ground level to support or strengthen the framework is vital. Therefore, the introduction of the organization of life cycle theory; resource-based theory and the contingency theory is proficient to picture the research framework for this study.

### **2.11.1 The organization of life cycle (OLC) theory**

The metaphor of life cycle theory has been widely used by previous researchers to explain the development of one's business status. In general, theories on stages of organizational development postulated common sequences in organizations as they survive and develop over time, from the birth until the declining stage. Robbins and Barnwell (2006) refer the organizational life cycle, "to the pattern of predictable change through which the organization moves from start-up to dissolution" (p.16) while Korunka, et al., (2010) describes life-cycle theory as the role of entrepreneurs in different stages of small business development by providing a dynamic perspective on the development of organizations over time. There were few past studies integrated life-cycle models in the entrepreneurship research to describe the development of small businesses in different phases over time (e.g., Lewis & Churchill, 1983; LeBrasseur, Zanibbi, & Zinger, 2003; LeBrasseur & Zinger, 2005; Mount, Zinger, & Forsyth, 1993).

The agreement on how many stages in the life cycle models contributed to various results. Duobiene (2013) emphasized that most of previous researchers agree with the three stage of life cycle theory which is ventures are established, grow up and decline. Other researcher believes, differing in the number, length, and designation of phases, life-cycle models usually illustrate a cycle of emergence, adolescence, and post-adolescence as phases of an organization's development (Lewis & Churchill, 1983; Kazanjian & Drazin, 1990; Lester, Parnell, & Carraher, 2003; Scott & Bruce, 1987). Robbins and Barnwell (2006) derived the stages of life-cycle model from the marketing perspectives. However, an organization cannot be considered as a product. Thus, instead of replicate four stages in marketing perspective, they agree that organization life cycle should have five stages which are; entrepreneurial stage, collectivity stage,

formalization and control stage, elaboration of structure stage and decline stage. Figure 2.7 depicts the stage of organizational life cycle model according to Robbins and Barnwell (2006) and the explanation of the stage as below;

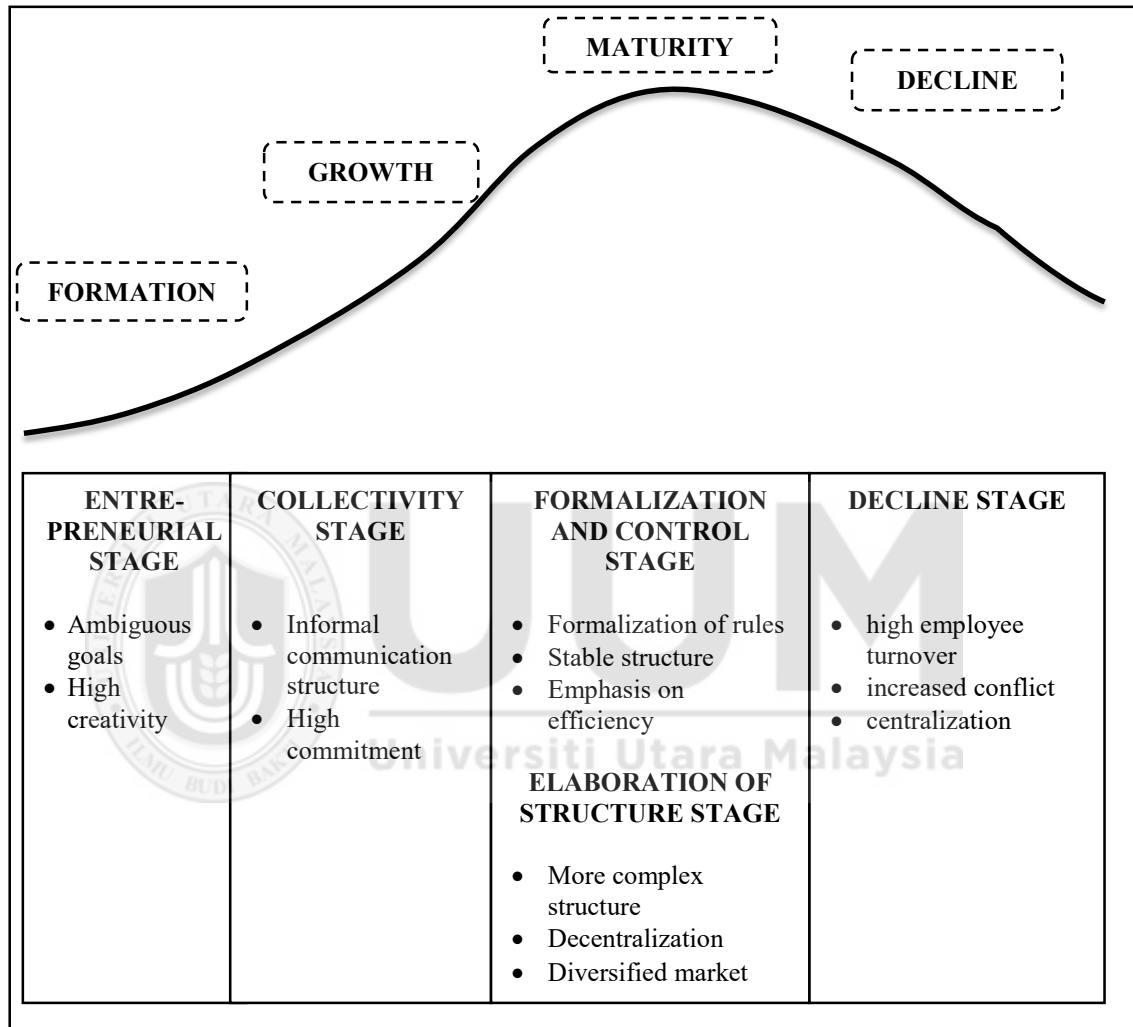


Figure 2.7. Organizational life cycle model. Adopted from Robbins and Barnwell (2006).

1. *Entrepreneurial stage*. In product life cycle approach, this stage is known as a formation stage and the firm is still infancy where the goals of the business tend to be fluid and ambiguous. In this stage, entrepreneurs are seen to have high creativity and manageable. When the firm is ready to move to the next stage, the entrepreneurs must be ready with meeting the demands in acquiring and maintain enough supply of resources like capital and labor. Failed to meet the necessary need for company's



development may lead the firm countenance the discontinuity of business in the early phase.

2. *Collectivity stage*. In this stage, the firms will continue with the innovation while the goal of business is clearer and increased the survival rate. The communication and structure of the firm becomes essential where all people in the firms are put their high commitment to strive the company's success. In this stage, the firm is still small with intensive structure and hands-on management.

3. *Formalization and control stage*. As the business grows and the product of company established, in this stage the operation of the firm is stable. As the innovation de-emphasized, the firms may take greater importance to focus on its efficiency and stability. Decision making takes more conservative orientation as it seeks to protect existing investment and market position and the role of managing the business no longer on the founder's alone, but responsibilities are distributed between members in the organization.

4. *Elaboration-of-structure stage*. The firm has reached a large size and the characteristics of bureaucracy in this stage. Management searches for new products and growth opportunities to maintain their momentum of expansion.

5. *Decline stage*. Because of stiff competition, poor management, trend changes, obsolete technologies, employee turnover and the firm experiencing the decline stages. In this stage, entrepreneurs should be proactive in finding solution for their downfall like look for new opportunities. Decision making becomes more centralized and eventually the firm ceases to exist.

From the stage explained above, in the first stage of organizational life cycle model, the first crossover takes place when business begin to commit time and resources to create new venture (Reynold & White, 1997). As defines in chapter 2 of literature review, section 2.1, those who are identified as taking steps to find a new business but not yet succeeded is called as nascent entrepreneurs (Long, et al., 2010). In addition, Carter, et

al. (1996) pointed out in their study the sequence of activities such as searching for facilities, seeking the reliable resources has a significant impact on creating a successful new business.

Not all nascent entrepreneurs expect they will have smooth journey of creating the business. Joachim Wagner point out in the book chapter of “the life cycle of entrepreneurial venture” by Parker (2006) the entrepreneurs see their vision through to an eventual start-up in some given period, then some of them give up and others are still trying. Korunka, et al. (2010) postulates the life cycle theory of nascent venture in the terms of ‘liability of newness’. They said that the younger of the venture, the higher risk of failure which indicates the ‘liability’ can take place in the emergence process of the venture. Within this time, the organizational environment is structured by the founder’s decisions.

Jawahar and McLaughlin (2001) reviewed from the past theory and research where the pressures, threats, and opportunities in the external and internal environment of an organization vary with the life cycle stages. These factors lead to the founders’ decision and organizational structuring. Understanding the need of well structuring of resources and capital may stringent nascent entrepreneurs as their business still young. Creating the competitive advantages for the firm also is complex. Not only that, the issue of firm performance also has been central in strategy research for decades especially for nascent entrepreneurs. this encompasses most other questions that have been raised in the field, as for instance, why firms differ, how they behave, how they choose strategies and how they are managed (Porter, 1991). Align with the theory of organizational life

cycle (OLC), the theory of resource-based view (RBV) how the firms compete based on their resources and capabilities (Peteraf & Bergen, 2003).

### **2.11.2 The resource based view (RBV) theory**

Resources based view theory was introduced in the mid-1980s by Wernerfelt (1984), Rumelt (1984) and Barney (1986). This theory becomes one of the dominant contemporary approaches to understand the entrepreneurial strategy and do analysis to sustained competitive advantage of the company. Barney (1995) emphasized in his study that RBV has develop the need of managing the resources together in unique and dynamic approach in achieving the venture's performance through its competitive advantage. The resources are viewed as valuable, rare, hard to imitate and non-substitutable to gain the competitive advantage standing (Barney, 1991). He also defines resources as "Firm resources include all assets, capabilities, organizational processes, venture attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness" (Barney, 1991a, p.101; 2002, p.155).

Resources can be classified as financial, physical, human, technological and organizational (Grant, 1991) while Wernerfelt (1984) claimed that a resource is meant anything which could be thought of as strength or weakness of a given venture. Kraaijenbrink, Spender and Groen (2010) suggest that the definition of resources in RBV should be improved substantially if its basic logic would be refined by explicitly recognizing differences between types of resources like static, dynamic; tangible, intangible; financial, human, technological; deployed, in reserve; perishable, non-perishable; and others.

While the types of resources have been questioned by the previous study, the concern of this theory also related to the entrepreneur as the main character to bring the ventures to success. The entrepreneurial outcomes are also competitive outcomes, that is, they lead to the production of goods or services at lower costs or qualities that are higher than those of the competition (Mosakowski, 1998, p.626). According to Foss (2011), in exploiting business opportunities, the entrepreneur has to gather all the resources and modify the available resources which will contribute to the aimed opportunities. This exploits behavior assisting the relationship between entrepreneurs' characteristic in RBV.

Cooper and Gimeno-Gascón (1992) postulates the basis of nascent entrepreneurial activities across the literature in general fall into four broader categories; demographics, human capital, financial capital, and social capital. Peake and Marshall (2006) further explained in an entrepreneurial context, human capital consists of the skills, experience and education an entrepreneur brings to the venture while financial capital includes the debt or equity funds an entrepreneur has available for venture start-up. The financial capital possibly acquires from individual, family, loans from bank and financial institution and from government aided program. Social capital encompasses family members, social networks, connections that may provide useful resources for new venture creation.

In the early stage of organizational life cycle theory, the formation stage requires nascent and new entrepreneurs to be efficient in managing their resources. Financial capital in this stage is still not sturdy. Therefore, seeking assistance from government is another way to accumulate their resource productively. In development process, the

entrepreneurial activity thus implies technology cooperation, that is, working with host governments and businesses to build appropriate infrastructure, develop human resources, and nurture competitiveness (Schmidheiny, 1992).

Davidsson and Honig (2003) agreed that social capital also vital for nascent ventures. Social capital can be a useful resource both by enhancing internal organizational trust through the bonding of actors, as well as by bridging external networks in order to provide resources (Adler & Kwon 2002; Putnam, 2001). The idea that ventures are embedded in a social context that consists of networks, linkages or relationships with other social entities has brought the concept of social capital to the forefront of contemporary debate on the RBV. This social capital is viewed as an asset that affords the venture access to various resources that would be beyond its reach if the venture acted in separation (Lages, Silva, Styles, & Pereira, 2009; Davidsson & Honig, 2003).

Albeit the prominent theory of RBV in entrepreneurship research has reached its maturity understanding, this theory has veiled in few issues. Barney, Ketchen and Wright (2011) review the RBV theory has undergone an evolution that mirrors the first three stages of the product life cycle; introduction, growth, and maturity. Kraaijenbrink, et al. (2010) critiques the used RBV theory in entrepreneurship research. In their study, they found eight reasons the deficiency of this theory. The critique is summarized in Table 2.10.

On the other hand, while Barney (1991) suggested that resources are controlled to create competitive advantages which in turn confer performance of the firm, Aziz (2010) emphasized that competitive advantage is difficult to measure. This has been supported

Table 2.10

*Summary and Assessment of Critiques to the RBV*

| Critique  | Assessment   |
|---|--|
| 1. The RBV has no managerial implications.                                    | <ul style="list-style-type: none"> <li>Not all theories should have direct managerial implications and through its wide dissemination, the RBV has evident impact.</li> </ul>  |
| 2. The RBV implies infinite regress.  | <ul style="list-style-type: none"> <li>Applies only to abstract mathematical theories. In an applied theory such as the RBV levels are qualitatively different. It may be fruitful to focus on the interactions between levels rather than to consider higher levels prior as a source of sustained competitive advantage (SCA).</li> </ul>  |
| 3. The RBV's applicability is too limited.                                    | <ul style="list-style-type: none"> <li>Generalizing about uniqueness is not impossible by definition and the path dependency is not problematic when not taken to the extreme. The RBV applies to small firms and startups as well, as long as they strive for an SCA but the RBV only applies to firms in predictable environments.</li> </ul>  |
| 4. SCA is not achievable.   | <ul style="list-style-type: none"> <li>By including dynamic capabilities, the RBV is not purely static. Though, it only explains ex post, not ex ante sources of SCA. While no competitive advantage can last forever, a focus on SCA remains useful.</li> </ul>   |
| 5. The RBV is not a theory of the firm.                                       | <ul style="list-style-type: none"> <li>The RBV does not sufficiently explain why firms exist. Rather than requiring it to do so, it should further develop as a theory of SCA and leave additional explanations of firm existence to transaction cost economist.</li> </ul>  |
| 6. VRIN/O is neither necessary nor sufficient for SCA.                        | <ul style="list-style-type: none"> <li>The VRIN/O criteria are not always necessary and not always sufficient to explain a firm's SCA. The RBV does not sufficiently consider the synergy within resource bundles as a source of SCA. The RBV does not sufficiently recognize the role that judgment and mental models of individuals play in value assessment and creation.</li> <li>VRIN/O refers to valuable, rare, inimitable, and non-substitutable (VRIN) plus when there is an appropriate organization in place (O) (Barney, 1994).</li> </ul> |
| 7. The value of a resource is too indeterminate to provide for useful theory. | <ul style="list-style-type: none"> <li>The current conceptualization of value turns the RBV into a trivial heuristic, an incomplete theory, or a tautology. A more subjective and creative notion of value is needed.</li> </ul>   |
| 8. The definition of resource is unworkable.                                  | <ul style="list-style-type: none"> <li>Definitions of resources are all-inclusive. The RBV does not recognize differences between resources as inputs and resources that enable the organization of such inputs. There is no recognition of how different types of resources may contribute to SCA in a different manner.</li> </ul>   |

*Sources.* Adopted from Kraaijenbrink, et al. (2010).

by the critiques of Kraaijenbrink, et al. (2010) where they claimed that sustained competitive advantages are not achievable. The relationship on competitive advantage contributed to business performance still ambiguous. Previous scholar like Coff (1999) and Montgomery (1995) have doubted on this relationship. They signify that there is no 'neat connection between resources and performance.

Recent study by Barney, et al. (2011) suggest to the future researchers, although RBV reached its maturity stage, new improvements will help ensure that RBV achieves revitalization and avoids decline. In fact, the review of RBV in this study to depicts the group of resources for nascent ventures. Government assistance programs and online social networking adoption were identical types of resources in RBV theory. While the measuring performance in RBV still being an issue, as the entrepreneurs need to organize their nascent venture strategy with the available resources, the contingency theory is adequate to depict the link between resources, strategy and performance.

### **2.11.3 The contingency theory**

The study on the relationship between resources and new venture performance has taken place in the current entrepreneurship literature (Vanhoutte, Martens, Winne, Sels & Baesens, 2010). Firm's resource is considered important as they dent the firm at start-up and affect the firm's future competitive position (Bamford, Dean & Douglas, 2004). Vanhoutte, et al. (2010) further explained the valuable resources of the firm based on previous studies are; financial capital (Lee, Lee & Pennings, 2001), outside advice (Chrisman & McMullan, 2004), planning (Delmar & Shane, 2003), entrepreneur's experience and education (Robinson & Sexton, 1994), and networking (Hoang & Antoncic, 2003).

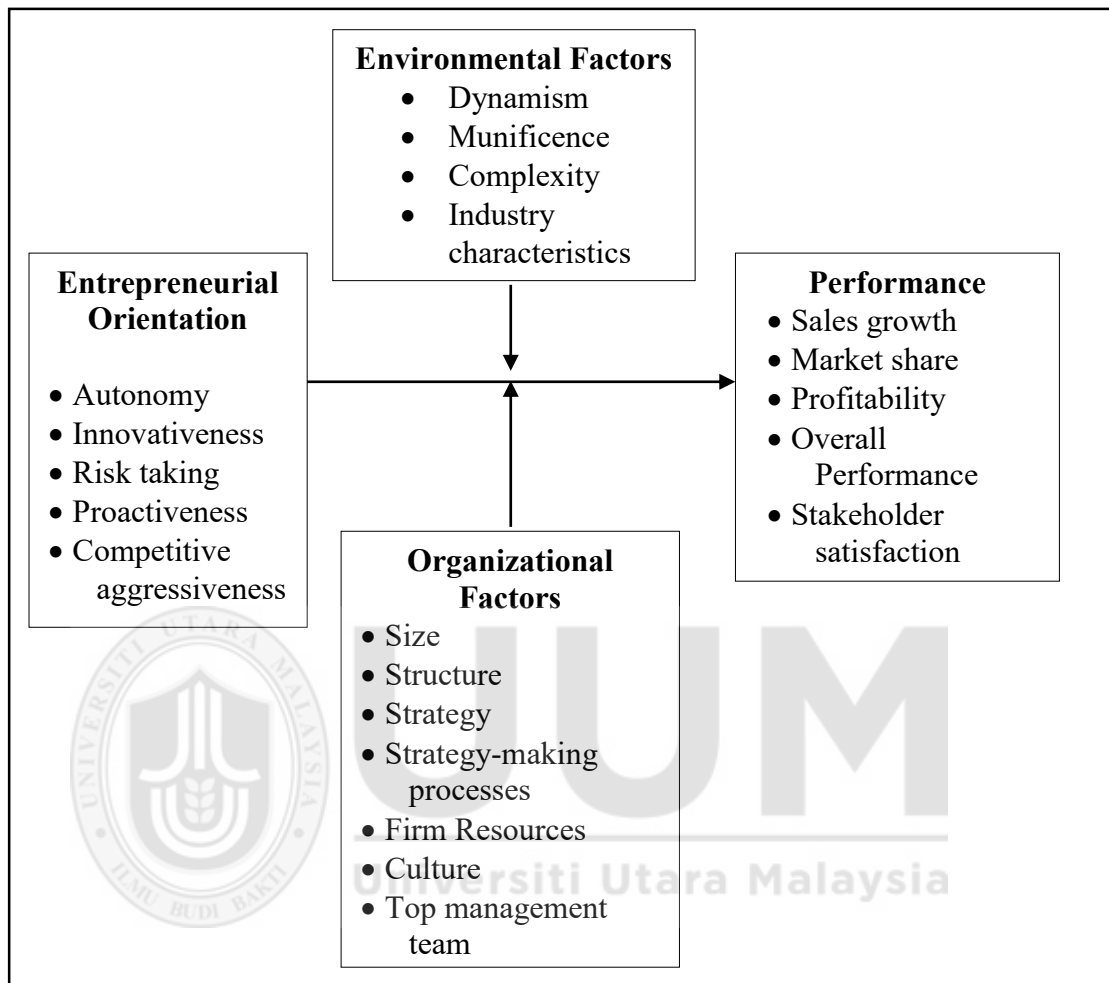
In reviewing the value of resources, Barney, Wright and Ketchen (2001) study it from a contingency perspective where they assume that the value of resources is depend on the specific context in which they are organized. Contingency theory is based on the underlying premise that the organization's structure and must have good fit with environment to achieve its effectiveness. The theory suggests that an organization's structure is contingent on contextual factors such as environment, strategy and size (Gerdin and Greve, 2004).

According to Lumpkin and Dess (1996), the environment factor consists of uncertainty, munificence and turbulence. In explaining the venture's performance, environmental factors, such as dynamism and munificence, or structural factors, such as the decentralization of decision making, may influence the performance of firms with an entrepreneurial orientation. Covin and Slevin (1991) discussed the relationship of strategy, structure, and environment to the EO dimensions of innovativeness, risk taking, and proactiveness in the model of entrepreneurship as firm behavior. Using these three dimensions, several researchers have verified the importance of viewing the EO-performance relationship in a contingency framework (e.g., Covin & Slevin, 1989; Karagozoglu & Brown, 1988; Zahra & Covin, 1995).

Figure 2.8 below portrays the seminal work by Lumpkin and Dess (1996). Despite the fact there is a rise of configuration approach in covering the inconsistency and shortfall of contingency theory (Black & Boal, 1994; Barney & Clark, 2007; Vanhouttee, 2010; Wiklund and Shepherd, 2005; Miller, 1981; Hambrick & Mason.1984) and applicable in determining the fit of the variables for nascent venture performance (Michor, Harms, Schwarz & Breitenecker, 2010; Korunka, et al., 2003; Harms et al., 2009; Michor, et



al., 2010; Vanhoutte, et al., 2010; Chatterjee, 2014), the contingency theory appears to be most suitable underpinnings theory in explaining the framework of this study.



*Figure 2.8.* Conceptual framework of entrepreneurial orientation based on the contingency theory. Adopted from Lumpkin and Dess (1996).

Next subsection explains how these theories underlines the variables and grasped in as a research framework to explain the influenced factors of nascent venture performance.

#### **2.11.4 The composite theory of organization life cycle theory, resources based view theory, bricolage model and contingency theory.**

Theories are formulated to explain, predict, and understand phenomena and in many case to challenge or extend existing knowledge within the limits of critical bounding assumptions (Gabriel, 2008). Meanwhile, the used of theory in quantitative study to test and verify the theory (Creswell,1994). Theories underlies with this research are OLC theory, theoretical model of entrepreneurial success in developing economy, RBV theory and contingency theory. The combination of these theories to represent the research framework of this research and to extend the existing knowledge infulfilling the gaps for this study.

Understanding how nascent ventures emerge is a major research challenges (Rasmussen, Mosey and Wright, 2011) and reliable explanation of how entrepreneurial ventures are created and developed is justified (Alvarez & Barney, 2007). The entrepreneurial process inherently complex regarding few factors like uncertainty of business environments, competitive market, defficiency of resources and how ventures developed best business concept (Bhave, 1994; Shepherd et al., 2000; West & Noel, 2009). Thus, acquire necessary resources (Baker & Nelson, 2005) and make effective decisions (Saravathy, 2001) lessen the risk of business failures among nascent ventures. Understanding the organizational life theory is pivotal to understand the metaphor of emergence stage where the creation of nascent venture and its development begins.

In the emergence stage of organizational life cycle model, the first edge takes place when business begin to commit time and resources to create new venture (Reynold & White, 1997). Meanwhile, Carter, et al. (1996) pointed out in their study the sequence

of activities such as searching for facilities, seeking the reliable resources has a significant impact on creating a successful new business. Tangled with the liability of newness, nascent ventures in dire of seeking the resources for their survival (senyard, 2009; Korunka, et al., 2010). Understanding what is needed most by entrepreneurs in the emergence phase being a focal point of how this study contributes to the development of nascent venture. In this stage, as mention by previous study, to lessen the risk of business discontinuity and increase the survival rate by enhancing performance through acquiring resources (Baker & Nelson, 2005; Senyard, 2009; Yusof, 2012) and employs effective strategy for ventures (Saravasthy, 2001; Katila, et al., 2008; Hallen & Eisenhardt, 2012).

Resource acquisition is a crucial point since resources with value, rareness, inimitableness and non-substitutability can create sustainable competitive advantages and have a significant impact on performance (Foss 1996) for nascent ventures. According to Barney (1991), a firm's resources were categorised as physical, human and organisational capital resources. While physical capital includes the physical technology, plant and equipment, geographic location and access to raw materials, human capital includes training, experience, intelligence, relationships, and the abilities and attributes of individual managers and workers (Barney, 1991). Organisational capital then includes structures for reporting, formal and informal planning, and the whole organising process in the firm (Barney, 1991).

Capturing resources at nascent stage through RBV theory elaborates the importances of government assistance and online social networking for nascent ventures' development. The discussions on RBV theory in subsection 2.11.2 pinned the

importance of working with government or any other institutions in obtaining resources will accumulate nascent ventures resources productively (Schmidheiny, 1992). Meanwhile, the importance of online social networking also is regarded as resources for the firm where social capital is another mean in acquiring external resources. As reported by Birley (1985), business contacts sought through social network were more helpful than family and friends in gaining access to raw materials or supplies, business equipment, locations, employees and sales, whereas family and friends were the primary sources of capital. With regards discussion on the resources-based theory, we viewed the variables of government assistance programs and online social networking adoption were regards as firm resources.

This research evaluating nascent venture performance through contingency theory. A research done by Pertusa-Ortega, Molina-Azorin and Claver-Cortes (2010) comprehend the relevant of RBV towards contingency theory in strategy-structure-performance paradigm. Results support that RBV still complimenting the contingency theory where it possible to reframe the relationships between strategy, structure, resources as a sources of competitive advantage for business performance. Meanwhile, the study from Lumpkin and Dess (1996) employs contingency theory in determining factors of entrepreneurial orientation influenced the new firms performance through indirect relationship of environment factors like dynamism, munificence, complexity, industry characteristics and organizational factors like firm size, firm structure, firm resources, culture and top management team. As government assistance program and online social networking adoption is regards as firms' resources through RBV theory, the entrepreneurial strategy of entrepreneurial orientation and entrepreneurial bricolage is compounding with contingency theory in determining the factors of nascent venture

performance. Recent research model by Gielnik and Frese (2013) also exhibit entrepreneurial bricolage is indirectly influence entrepreneurial success through firm resources as a moderating variable.

From above discussions, the composite of few theory able to explain the roots which underlies this research. The OLC theory was employed to described best strategy for nascent ventures need for their survival and performance. Meanwhile, RBV theory was engaged to explain the GAP and OSN variables as contingent factors of firms resources. Thus, GAP and OSN were regard as moderator variable in this study based on contingency theory and entrepreneurial success model. Further, the contingency theory by Lumpkin and Dess (1996) along with recent model of entrepreneurial success by Gielnik and Frese (2013) were employs to apprehend the relationship between entrepreneurial orientation and entrepreneurial bricolage with nascent venture performance.

## **2.12 Chapter Summary**

The chapter begins with the review of literature on the emerging stage of entrepreneurship. The discussion focused on the understanding of nascent venture in the early phase of their emergence. Later, we discussed thoroughly the nascent venture performance. This includes the discussion on types of performance, how we measure nascent ventures performance and an outlook of measuring online business performance. In the emerging stage, ventures' strategy and resources acquisition played significant role in determining nascent venture performance and their survival. Entrepreneurial strategy of bricolage and entrepreneurial orientation were discussed in

depth to distress its influenced on nascent venture performance. Meanwhile, government assistance programs and online social networking were discussed as firm resources which improved nascent venture performance. Related theory like social capital theory, entrepreneurial success model, and UTAUT were touched to have better understanding on the variables of the study. This chapter also discusses about previous studies related to the objectives of the study and reviews the background of the definitions of malay-owned nascent ventures in the Malaysian context, and other related variables: EB, EO, GAP, OSN and nascent venture performance. Next, direct and indirect effects of the interrelated variables have been examined thoroughly through the empirical and past studies by the other researchers. Hypotheses have been formulated to answer the research question and research model has been developed to meet the objectives of the research. Below are statements of twelve hypotheses developed for this study. The methodology used to conduct this study presented in the next chapter.

H1: The venture strategy of entrepreneurial bricolage has a significant effect on nascent venture performance.

H2: The venture strategy of entrepreneurial orientation positively influences the nascent venture performance.

H2a: The venture strategy of innovativeness positively influences the nascent venture performance.

H2b: The venture strategy of proactiveness positively influence the nascent venture performance.

H2c: The venture strategy of risk taking positively influence the nascent venture performance.

H3: Government assistance program moderates the relationship between entrepreneurial bricolage and nascent venture performance.

H4: Government assistance program moderates the relationship between entrepreneurial orientation and nascent venture performance.

H4a: Government assistance program moderates the relationship between innovativeness and nascent venture performance.

H4b: Government assistance program moderates the relationship between proactiveness and nascent venture performance.

H4c: Government assistance program moderates the relationship between risk taking and nascent venture performance.

H5: Online social networking moderates the relationship between entrepreneurial bricolage and nascent venture performance.

H6: Online social networking moderates the relationship between entrepreneurial orientation and nascent venture performance.

H6a: Online social networking moderates the relationship between innovativeness and nascent venture performance.

H6b: Online social networking moderates the relationship between proactiveness and nascent venture performance.

H6c: Online social networking moderates the relationship between risk taking and nascent venture performance.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

This section elaborates the research strategy employed in providing answers to the research questions. The methodology part of this study describes the selection of research design, population and sampling procedures, improvement of survey instrument, measurement construct and data collection procedures. This chapter also reports the discussion on data collection results, non- responses bias test, validity and reliability test.

#### **3.1 Research Paradigm**

A paradigm is a way of describing a world view that is informed by philosophical assumptions about the nature of social reality (known as ontology – that is, what is about the nature of reality?), ways of knowing (known as epistemology – that is, how and what is the current knowledge?), and ethics and value systems (known as axiology – that is, is it true?) (Patton, 2002). This research is a positivism research. Positivism adheres to the view that only “factual” knowledge gained through observation (the senses), including measurement, is trustworthy (Johnson & Duberley, 2000). In positivism studies the role of the researcher is limited to data collection and interpretation in an objective way. In these types of studies research findings are usually observable and quantifiable.



Positivism depends on quantifiable observations that lead to statistical analyses. It has been noted that “as a philosophy, positivism is in accordance with the empiricist view that knowledge stems from human experience. It has an atomistic, ontological view of the world as comprising discrete, observable elements and events that interact in an observable, determined and regular manner” (Collins, 2017, p.38). Moreover, in positivism studies the researcher is independent from the study and there are no provisions for human interests within the study. Crowther and Lancaster (2008) argue that as a general rule, positivist studies usually adopt deductive approach, whereas inductive research approach is usually associated with a phenomenology philosophy. Moreover, positivism relates to the viewpoint that researcher needs to concentrate on facts, whereas phenomenology concentrates on the meaning and has provision for human interest.

### **3.2 Research Design**

Research design is the outline for the collection, measurement, and analysis of data. Research design also is considered as a structure which holds the components of research together and outlined based on research questions (Cooper & Schindler, 2006). There were few types of research design such as quantitative, qualitative and mixed method research. These types of research were designed accordingly that could be used for a different research conducted by researchers.

#### **3.2.1 Overview of research design**

A review from earlier works in Entrepreneurship in general and business strategy provides some insights on the appropriate research design for the present study. Due to

the difficulty in identifying nascent ventures, i.e., entrepreneurs who are in the beginning of venturing their business, some previous entrepreneurship studies have explored the nascent entrepreneur's performance and decision-making process using established firms or retrospective case studies. The results and findings of these studies can be highly biased due to participants' diminished accuracy of recall in assessing their earlier efforts to create a firm (Blair & Burton, 1987; Cassar & Craig, 2009; Lee, 2009). Meanwhile, Saede (2013) used qualitative approach to explore the appropriate firm's age to differentiate the definition of nascent entrepreneurs and new entrepreneurs. Previous researchers also have been encouraged to use large longitudinal data sets from entrepreneurs to emphasize on the development process of nascent entrepreneurs. This method could provide policymakers with relevant information to develop and fine-tuned programs to promote new firm formation, and business development (Carter, Gartner, & Reynolds, 1996; Ucbasaran et al., 2001; Wu, 2004). However, this method requires more time, effort and cost compared to cross-sectional studies.

### **3.2.2 Selection of research design**

This study employs a quantitative approach of research. Leedy and Ormrod (2005) suggested the quantitative approach is suitable to use when the study is examining the relationships and hypotheses testing by validating the related variables. In fact, quantitative study is proficient in deciding before and after outcomes and confirms hypotheses by testing theory and at the same time able to clarify and predicted measured variables and phenomena (Leedy & Ormrod, 2005). Furthermore, quantitative approach is appropriate for a deductive research, objective and outcome-oriented studies by using standards of validity and reliability of statistical procedures (Creswell, 2008). Another

researcher also highlighted that quantitative approach can be generalized compared to qualitative approach (Babbie, 2004).

The nature of this study is a cross-sectional research whereby the data is collected, analyzed, and summarized statistically and conclusions are drawn at a single point in time. The revision from past studies also proved that cross-sectional study is chosen over a longitudinal study in most cases due to the resources and time limitations (Cavana, Delahaye & Sekaran, 2001; Sekaran, 2003; Veal, 2005). Hence, this study adopts a cross-sectional data approach in the data collection process.

Survey method also suitable for this study as it is the best way to obtain information about belief, attitude, perception or opinion from people in their natural environment (Graziano & Raulin, 2004; Gay & Diehl, 1992; Babbie, 2004; Jenkins, 1985). This method involves collection of sizable responses using the most economical approaches (Mohamad, 2012), based on standardization and uniformity (Cooper & Schindler, 2006). Pinsonneault and Kreamer (1993) highlighted three most dominant characteristics of survey method. Firstly, it produces quantitative description of observed phenomenon from a specified population. Secondly, researchers solicit perception or opinion of a particular phenomenon by asking structured and predefined questions to the target respondents. Lastly, the observation usually covers certain proportions of the total population (samples) which allows for generalizing the outcomes to the population at large.

The advantage of survey method is the researcher can test the a priori hypotheses (Mohamad, 2012). In other words, researchers are required to establish the research

model before the data collection procedures was carried out. Then, the researcher tests the proposed research model with the sample observation obtained from actual phenomenon. In survey method, testing the hypotheses amongst larger number of variables in a single study was a key advantage for researchers. While Singleton and Straits (1999) agreed that survey method is appropriate to help author address multiple research objectives in a single study, Kelley, Clark, Brown and Sitzia (2003, p.262) listed the advantages of using survey method in health research. They agreed through survey method; (1) the research produces data based on real-world observations (empirical data), (2) the breadth of coverage of many people or events means that it is more likely than some other approaches to obtain data based on a representative sample, and can therefore be generalizable to a population, and (3) surveys method can produce a large amount of data in a short time for a fairly low cost. Thus, researchers can set a finite time-span for their study which can assist in planning and delivering end results.

Since the population of new businesses quite large based on the company registration database obtained from Companies Commission of Malaysia (CCM), survey method is useful for researchers who wish to reach a large number of respondents. Notably, the approach also considered best method to seek the responses from SME's owner or manager whom are difficult to access via other methods (Mohamad, 2012; Bartholomew & Smith, 2006; Greer, Chuchinprakarn & Seshardi, 2000). Based on above arguments, this study considered survey method to collect data from the target respondents. However, the accuration in designing and piloting the instruments prior to the actual data collection is highly needed to ensure an effective survey design. Futher discussion is on data collection procedures. Figure 3.1 below simplifies overall research design as well as approaches taken in conducting this study.

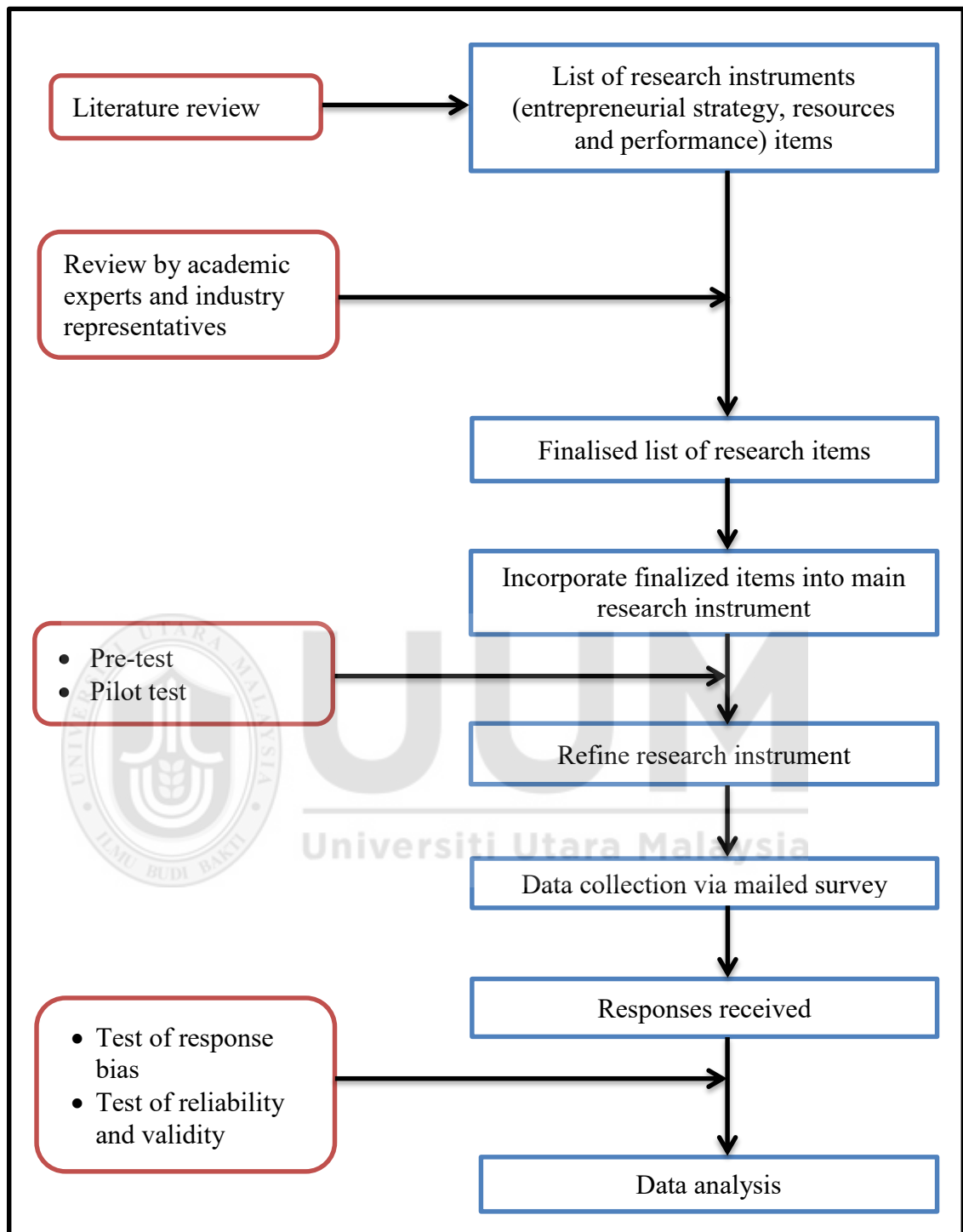


Figure 3.1. Research Design and Approaches. Adapted from Mohamad (2012).

### **3.3 Sampling procedures**

Sampling is the process of selecting some elements from a population to represent the whole population (Cooper & Schindler, 2006). Following the work of Iacobucci (2010), Cooper and Schindler (2006), and Wilson's (2006), they propose the sampling procedure engages with several steps. Firstly, is defining the target population of interest. Secondly, is identifying the sampling frame. Thirdly, is selecting appropriate sampling method. Fourthly, is to determine the needed sampling size. Finally, is to choose suitable data collection technique (Iacobucci, 2010; Cooper & Schindler, 2006; Wilson's, 2006) as discussed in subsection.

#### **3.3.1 Population**

A target population can be understood as a set of elements that possess the information needed and about which inferences are to be made by the researchers (Malhotra & Birks, 2006). The target population in this study is the entrepreneurs of nascent ventures. Most of the previous entrepreneurship studies targeting the population through the SME definition (Mohamad, 2012), this study is diverged by concentrating at the years of operation. In order to fulfill the nascent ventures criteria, entrepreneurs who started their business in year 2010 will be used as a cut point to identify the age of operating of nascent ventures. The population of this sample also must comprise of entrepreneurs who started their own business. The other inclusion criteria which will be used for sample selection in this study as follow;

1. Individuals who started their own business.
2. Individuals are Malay.

3. Individuals who are actively participating in the management of the business venture.
4. The venture must be a stand-alone business, not a franchise or part of larger organization, and
5. The venture must be at least or not more than 5 years old.

In this study, entrepreneurs who are managing their own businesses will be identified as target respondents. The age of the ventures will be the main criteria in identifying the target population to represent the nascent ventures. From the discussion of nascent venture in chapter two, the nascent venture in this study is defined as ventures which are in the emerging stage (between gestation and infancy stage) of the entrepreneurial process. In the entrepreneurial process, a venture is developed from the individual entrepreneurs to the fledgling firm. The nascent ventures in the emerging stage are recognized when the entrepreneurs succeed to establish new ventures from fledgling firm (Reynolds, 1994; Bosma & Amoros, 2013; Wagner, 2004). The age of their ventures must not more than 5 years of operating (Xavier, at al., 2010).

Align with the criteria of target population set in this study, SMECorp, MARA, PUNB, INSKEN and TEKUN are the most appropriate sources. However, these agencies could not retrieve the years of business operating. Meanwhile, we neglect the population from ACCCIM because it is served for Chinese entrepreneurs only and AIM focused on the women entrepreneurs. Therefore, in determining the nascent venture population, this study used the population from SSM. This is because by using the business registration date, the age of nascent ventures can be identified. The registration date of business was the main indicator to identify the category of nascent venture for this study. Hence, the database for this study was selected for the businesses which are registered in 1<sup>st</sup>

January 2010 to 30<sup>th</sup> January 2010 to ensure that the venture can be categorized as a nascent when the data collection process is carried out. Further, race information will be used to determine the Malay bumiputera entrepreneurs to meet another criterion of study.

In addition to the identifying the sampling frame of the study, Parasuraman, Badariah and Rathakrisnan (2011) claimed that sampling frame is an index that can be in the form of databases, directories or records. Previous study on entrepreneurs' performance in Malaysia context mostly used the index from various sources like database given by MARA, SSM, Department of Statistics, Malaysia and the Central Bank of Malaysia (Amir, 2011; Zainol & Ayadurai, 2011; ), list of entrepreneurs from directories like SME Corp.'s portal website or PUNB's portal website (Kheng, 2012; Tuanmat & Smith, 2011; Ahmad & Ramayah, 2012; Aziz, Mahmood, Abdullah & Tajudin, 2013), and records like Top SMEs winners of Malaysia Enterprise 50 Award 2004-2008 (Hung, et al, 2011).

In this study, the database from SSM will be used to identify the target population and the sample of respondents will be drawn from SSM database. The registration date of business will be the main indicator to identify the category of nascent venture for this study. Hence, the database for this study is selected based on businesses which are registered in January 2010 in order for the ventures to be categorize as a nascent venture (not exceed than or 5 years) when the data collection process is carried out. Further, ethnic information will be used to determine the Malay bumiputera to meet another criterion of study. Based on the Companies Commission of Malaysia (SSM) database, total number the business registered in year January 2010 which are actively operating



including sole proprietorship and partnership is 2,564 businesses. This study will use only the population of Malay bumiputera entrepreneurs. After deleting the duplicate company and filtering Malay bumiputera to fulfill the scope of the study, total population of Malay-owned nascent ventures for this category is 807 businesses.

### **3.3.2 Sampling frame**

In identifying the sampling frame for the study, Cooper and Schindler (2006) defined sampling frame as the listing of all population elements from which the sample will be chosen. In Malaysia, SMECorp, MARA, PUNB, INSKEN, AIM, TEKUN, ACCCIM and SSM are among the agencies which are actively provided the information about the entrepreneurs. In addition, they also act as a government agent in providing a platform for individuals who want to be entrepreneurs. Also, another function of these agencies is assisting the entrepreneurs who are in need of financial and non-financial supports. These institutions played their role as a government agent in providing conducive business environment for entrepreneurs. SMECorp was known as the Small and Medium Industries Development Corporation (SMIDEC) in 1996 before it changed to SMECorp in 2009. Its aim was to develop capable and resilient Malaysian SMEs to be competitive in the global market by providing infrastructure facilities, financial assistance, advisory services, market access and other support programmes (SMECorp, 2014). On the other hand, MARA, PUNB, INSKEN, AIM, TEKUN, ACCCIM also are the government agencies which have similar functions with SMECorp.

On the contrary, Companies Commission of Malaysia or known as SSM (Suruhanjaya Syarikat Malaysia) is a statutory body formed as a result of a merger between the Registrar of Companies (ROC) and the Registrar of Businesses (ROB) in Malaysia

which regulates companies and businesses. SSM came into operation on 16 April 2002. The main activity of SSM is to serve as an agency to incorporate companies and register businesses as well as to provide company and business information to the public. As the leading authority for the improvement of corporate governance, SSM fulfills its function to ensure compliance with business registration and corporate legislation through comprehensive enforcement and monitoring activities so as to sustain positive developments in the corporate and business sectors of the nation (SSM, 2014).

### **3.3.3 Sampling method**

In the third step of sampling procedure, Hair, et al. (2007) emphasized that in selecting appropriate sampling method, a balance should be strike in deciding the sample size. Cavana, et al. (2001) claimed that using too large a sample size may lead to a larger Type II error, a phenomenon where even weak relationship might reach significance level in any research, while Hair, et al. (2007) highlighted the matter of importance is the process used in the selection of the elements to ensure researchers got the right population for their studies. Zikmund (2003) agreed that the major obstacle for good research is resource constraints. Therefore, based on the above argument several factors such as variability in population, types of sample required, cost, time, budget, estimated precision and confidence level should be considered for findings to be generalized.

When the population is known, the used of probability sampling is appropriate as it is possible to answer research questions to achieve objectives that require you to estimate statistically the characteristics of the population from the sample (Saunders, Lewis & Thornhill, 2007). This study employed a systematic random sampling technique.

Systematic sampling involves randomly selecting the first item to sample and then selecting subsequent activities at regular intervals while Sauders (2009) explained the systematic sampling is a modification of random sampling in which we divide the population into two or more relevant and significant strata based on one or several attributes. By using this technique, a sample is chosen by selecting a random starting point and then picking every  $K^{\text{th}}$  element in succession from the sampling frame (Malhotra, 1996). Systematic sampling can only operate accurately if there is no inherent order to the listing of the population in the sampling frame (Aaker, Kumar & Day, 1998; Bryman, 2005). If such an order exists, there is the possibility of bias takes place where the structure of the sampling frame contributed to the result of over- or under-representation of particular categories of the population.

This study is focusing at nascent venture in Malaysia where the acquisition of nascent ventures definition was derived from their year of establishment. Therefore, the database acquired from SSM has listed the numbers of nascent ventures which were covered all states in Malaysia and all types of business ventures. Since the indicators of being nascent venture is not exceeding 5 years of establishments as discussed earlier, 807 ventures were a population for this study. There were few methods in identifying the needed sample size for the study. Israel (1992) outlined four strategies in determining sample size. These include using a census for small populations, imitating a sample size of similar studies, using published tables, and applying formulas to calculate a sample size. Using published tables (Krejcie & Morgan, 1970; Yamane, 1967; Bartlett, Kotrlik & Higgins, 2001) and calculation of sample size formula (Hair et al., 2010; Cochran's, 1977) are the most strategies used by Malaysian researchers especially in social science research.

By using a census for small populations, Hair et al., (2010) suggests a sample should preferably be more than 100 for factor analysis to proceed and recommended minimum sample sizes of 100-150 to ensure the maximum likelihood estimation (MLE) solution if the study use structural equation modeling (SEM) for statistical analysis (Hair, et al., 2003). The most popular published table by Krejcie and Morgan (1970) outlined the approximate sample size for the population of 800 is 260. While published table by Yamane (1967) suggested sample size needed for the population of 800 are 267 ( $e = \pm 5\%$ ), 163 ( $e = \pm 7\%$ ), and 89 ( $e = \pm 10\%$ ), given precision level ( $e$ ) is at different value, confidence level is at 95 percent and p-value at 0.05. Referring to Bartlett, Kotrlik and Higgins (2001) table, the sample size for the population of 800 are 76 ( $\alpha = 0.10$ ,  $t = 1.65$ ); 104 ( $\alpha = 0.05$ ,  $t = 1.96$ ); and 166 ( $\alpha = 0.01$ ,  $t = 2.58$ ). Although Bartlett, et al. (2001) suggested lowest minimum sample size for this population, the published table is calculated for 7- point likert scale. In identifying the sample size needed, author decided to calculate using Cochran's (1977) formula which is utilised two key factors (Bartlett, et al., 2001, p. 44-45);

- (1) the risk the researcher is willing to accept in the study, commonly called the margin of error, or the error the researcher is willing to accept, and
- (2) the alpha level, the level of acceptable risk the researcher is willing to accept that the true margin of error exceeds the acceptable margin of error.

Since the continuous data plays major role in data analysis, formula outlined by Cochran's(1977) for continuous data as below;

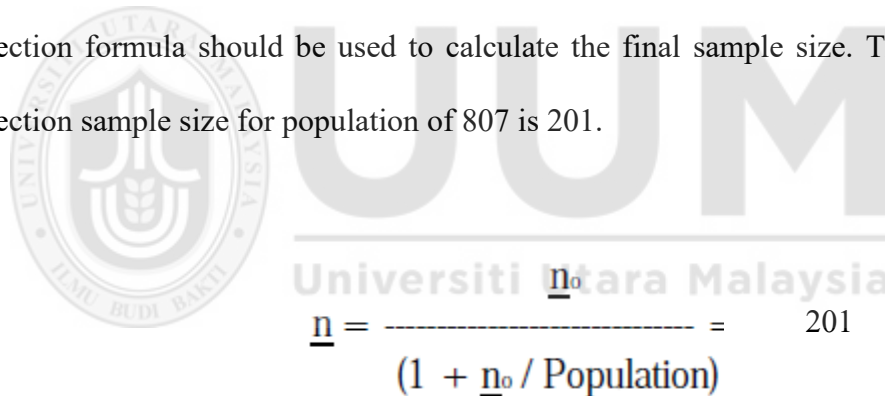
$$\underline{n}_0 = \frac{(\underline{t})^2 * (\underline{s})^2}{(\underline{d})^2}$$

Where t = value for selected alpha level of .025 in each tail = 1.96

Where s = estimate of standard deviation in the population = 1.25.

Where d = acceptable margin of error for mean being estimated = 0.15

Thus, for a population of 807, the required sample size is 267. However, since this sample size exceeds 5 percent of the population ( $807 * .05 = 40.4$ ), Cochran's (1977) correction formula should be used to calculate the final sample size. Therefore, the correction sample size for population of 807 is 201.



$$\underline{n} = \frac{\underline{n}_0}{(1 + \underline{n}_0 / \text{Population})} = 201$$

Where population size = 807.

Where  $n_0$  = required return sample size according to Cochran's formula = 267.

Where  $n_1$  = required return sample size because sample > 5% of population.

for this study, the sample size for this study is 201. The detailed calculation for sample size is at appendix G. To pick the  $K^{\text{th}}$  element, Saunders (2009) suggested to calculate the sampling fraction by using formula;

$$\text{Sampling fraction} = \frac{\text{Actual sample size}}{\text{Total population}}$$

The sampling fraction of this study after rounded is at the 2<sup>nd</sup> element of the population.

### 3.3.4 Sample size

A sample size can be determined based on the various methods proposed by previous researchers. As discussed in the earlier section, 201 nascent ventures were derived based on the target population. This sample size is considered reasonably adequate as the ranged is to be between 150 and 600 in most of the previous nascent venture studies as showed in Table 3.1.

Table 3.1  
*Response rate reported by previous studies in the context of nascent venture and Malaysian' SMEs*

| Study                     | Nascent Venture |               | Study                | Malaysian SMEs |               |
|---------------------------|-----------------|---------------|----------------------|----------------|---------------|
|                           | Sample size     | Response rate |                      | Sample size    | Response rate |
| Semrau, et al. (2012)     | 146             | 38.4          | Sohail & Teo (2003)  | 80             | 20.2          |
| Honig & Samuelsson (2011) | 223             | 86.0          | Ismail & King (2005) | 310            | 25.0          |
| Garonne, et al. (2013)    | 594             | 80.0          | Man & Wafa (2011)    | 100            | 18.8          |
| Dimov (2010)              | 615             | 74.1          | Kheng (2012)         | 147            | 26.8          |
| Kropp, et al. (2008)      | 539             | 83.0          | Zainol & Daud (2011) | 162            | 31.2          |

*Note.* The response rate and sample size of previous studies adopted from Semrau, et al. (2012), Honig & Samuelsson (2011), Garonne, et al. (2013), Dimov (2010), Kropp, et al. (2008), Sohail & Teo (2003), Ismail & King (2005), Mok & Wafa (2007), Kheng (2012), Zainol & Daud (2011).

However, with regards to the low respond rate of average 24.2 percent from five previous studies conducted in Malaysian context, it is suggested that the number of

questionnaires to be distributed should reach 1000 or more. The response rate that researcher should pursue is 100 percent. In reality, few researchers enjoy such a high figure. Previous researchers agreed that standard response rate researchers should achieve is usually centering on 70 or 80 percent (Sivo, Saunders, Chang and Jiang, 2006). Meanwhile, Babbie (1990) suggested that a response rate of 60 percent is good; 70 percent is very good.

Nonetheless, in the context of small business studies, Dennis (2003) found that response rates hovered around 30 percent. On the other hand, with respect to the nascent venture studies, previous researchers are able to achieve higher response rate at average at 72.3 percent (refer Table 3.1) due to the application of longitudinal study and the used of combined methods of survey (Semrau, et al., 2012; Honig & Samuelsson, 2011; Garonne, & Davidsson, 2013; Dimov, 2010; Kropp, Lindsay & Shoham, 2008). Meanwhile Malaysian researchers in particular in the SME context, have reported that there is a tendency to obtain low response rate. Ramayah, Yan and Suleiman (2005) recorded to obtain only 26.7 percent of response rate while Chelliah, Mohamed and Yusliza (2010) acquired the response rate of 25.7 percent in their study. However, the study done by Zainol and Daud (2011) had obtained higher response rate of 31.15 percent. Malaysian researchers agreed that responses rate among SMEs and entrepreneurship studies ranged between 20 and 22 percent (June & Mahmood, 2011; Julienti & Hartini, 2010; Kheng, 2012; Man & Wafa, 2011). Table 3.1 above represents the average of response rate as reported by previous studies.

It is observed that 20 percent of response rate suggests that 1/5th of the sample size from population are responding to the studies. Thus, accurate parameter estimation with

a 60 percent or more return should still be a concern. The researcher agreed that in order to achieve 60 percent of response rate, the sample size is needed to be adjusted for tendency of non-responses (Bartlett, Kotrilik & Higgins, 2001; Sivo, et al., 2006). As the average response rate of five previous studies in Malaysian SME is 24.4 percent (refer Table 3.1), to achieve the recommendable rate at more than or equal 60 percent, the sample size is needed to be tripled. Based on the SSM database, 201 of nascent ventures will be identified as a sample size based on calculation by using Cochran's formula (1977). Therefore, 603 nascent ventures were drawn from SSM database by applying a systematic sampling by selecting the ventures in database at each 2<sup>nd</sup> element. Table 3.2 summarizes the sample selection for this study.

Table 3.2  
Summary of sample selection

|   | <b>SSM</b> |
|---|------------|
| Initial number of ventures as sampling frame  | 2564       |
| Duplicate ventures  | (982)      |
| Non-malay ventures/ foreign ventures  | (775)      |
| Number of subjected available for sample selection  | 807        |
| Number of samples selected for pilot  | 100        |
| Number of samples selected for actual survey  | 600        |
| Total number of samples selected for distribution including pilot test<br>(subjected to 60% of response rate) | <b>700</b> |

### 3.4 Instrumentation

This subsection describes the development of the survey instrument. A good design of questionnaire increases the reliability and validity of the items. In fact, a questionnaire which is understandable and easy to read also will pleased the respondent to answer and easy to obtain desired information from targeted respondent. Paxson (1995)



suggested a proper instrument design would minimize the amount of time taken to complete questionnaire. While Leung (2001) and Babbie (2004) agreed that a good questionnaire design improves the responses rate and minimizes measurement errors. The use of short questionnaires for this study is vital since the study involving owners of the company who is relatively busy and has less time to concern to non-operational matters like academic surveys.

Previous study agreed on the presentation of questionnaire in a booklet format for respondent is appropriate (Mohamad, 2012; Dillman, 2007). A ten pages' questionnaire is printed covering the cover page; a cover letter contains objectives of the survey, the requirement of respondents needs by researcher, and researcher's contact and questionnaires. The letter also indicates confidentiality of the responses. For follow-ups and survey administration purposes, serial number is designated manually written on the top right corner of the second page of questionnaire. The main survey starts in the third page. Following Leung (2001), the structure of the survey underlying within the following aspects;

- Go from general to particular.
- Go from easy to difficult.
- Go from factual to abstract.
- Start with closed format questions.
- Start with questions relevant to the main subject.

With these guidelines, the author has designed a set of questionnaires consisting 59 self-report items segmented into 4 sections is developed which discussed in below

paragraph. Each section of the questionnaire contains clear and brief instruction to guide potential respondents to answer the given questionnaire. For the purpose of better understanding, a set of questionnaires consist of both Bahasa Malaysia and English versions are made available for respondents. Thus, respondents can choose which language version are they preferred to use.

#### **3.4.1 Section A: Personal Background Information**

The first part of questionnaire is information about the owners or managers. Since the focal point of this study is on nascent entrepreneurs, the demographic question consists of ten questions related on their business start-up. The age when started the business, work experience before starting a business, business start-up experience and its period if have are among of the questions which aim to describe their stage of business.

#### **3.4.2 Section B: Research Information**

Research information in the section B is generally asking on their resources acquisition in handling their ventures operations. In addition, we also asked the respondents on the entrepreneurial strategy they adopted for their nascent venture. The structure in the section B is dividing into four parts. In the first part, respondents were asked about the effectiveness of government assistance program to their business. The questions for this part is comprises the effectiveness of the program provided by the agency and the benefits of respondents gained in participating the programs.

While in the second part, respondents were asked regarding their perceptions in adopting online social networking for business. Deriving from UTAUT theory, the

questions is consisting from four aspects of adoption; performance expectancy, effort expectancy, social influence and attitude towards using technology. Performance expectancy is related to the usefulness of the social networking sites for business while effort expectancy is related with their perception in using the social networking sites.

social influence is about is the usage influenced from other people or environment while attitude towards using technology is explaining the respondents' behavior towards the usage of social networking sites for their business. The perception of receiving government assistance programs and social networking adoption falls under resources acquisition. These questions were asked to respondents to acquire better understanding of the core entrepreneurial activity by entrepreneurs in nascent venture when they are assembling available resources and pursue any business opportunity.

On the other hand, in the part three and part four, the respondents were asked about the entrepreneurial strategies in managing their nascent ventures. The questions in these parts are regarding the decision-making strategy choosed by nascent venture entrepreneurs. Senyard, Davidsson and Steffens (2010) defined bricolage as creative and intuitive strategy which influences firms to organise and reorganise resources to adapt to market opportunities or as a reaction to a crisis. Thus, the questions asked in the entrepreneurial bricolage part are derived from the bricolage definition of “making do by applying combinations of the resources at hand to new problems and opportunities” (Baker & Nelson, 2005, p.333).

Meanwhile, according to Lumpkin and Dess (2001), the entrepreneurial orientation is an entrepreneur's styles, method and decision-making styles in lead new firm to

performance is rooted in three types of behavior; innovative, risk-taking and proactiveness. The entrepreneur who is as an owner and a manager of the firm will be asked about their decision-making styles and methods in managing the firm based on the three-type's behavior as mentioned above. All the four part in the section B measures respondent's opinion using a five-point scale with '1' representing "strongly disagree and '5' for "strongly agree".

### **3.4.3 Section C: Firm performance**

Questions in this part assess firm's-oriented behavior impact in two aspects of business operations. The 6 questions of performance are comprised from the aspect of sales growth rate, market share, operating profit, new product development, market development, stakeholders' growth and development. Respondent is asked to state the level of their satisfaction on venture performance for each item in this section. All questions in the section C measures respondent's opinion on their satisfaction of venture performance using a five-point scale with a five-point scale with '1' representing "very unsatisfied" and '5' representing "very satisfied" is used to indicate the degree of satisfaction with own venture performance.

### **3.4.4 Section D: Firm Background Information**

This section contains selected firm's demographic information, namely; position in the company, number of employees, business category, time spend in managing business venture, firm location, the government assistance program received and its type, and firm adoption of social networking sites for business. The government assistance program is purposely asked to see their adoption of any types of training assisted by the

government and related agencies. Meanwhile, the question of firm's adoption on social networking sites, the question comprised the types of social network used for business, purpose of using, time spend and frequency of using the social networking sites. Table 3.3 below represents the survey questionnaire structure in this study.

Table 3.3  
Survey Questionnaire Structure

| Questions                                      | Section                           | Number of Items | Sources   |
|--|-----------------------------------|-----------------|---|
| <b>Part A: Personal Background Information</b> |                                   |                 |   |
| 1-7  | Respondent's profile              | 7               | Self-developed  |
| <b>Part B: Research Information</b>            |                                   |                 |   |
| 8-16   | Government assistance Program     | 9               | Yusuf (2010); Ahmad & Latif(2012); Hung & Effendi (2011); Zainol & Wan Daud (2011)  |
| 17-28  | Online social networking adoption | 12              | Sheng, et al.(2011); Pinho & Soares(2011); Zhou (2011); Venkatesh, et al., (2003).  |
| 29-36  | Entrepreneurial Bricolage         | 8               | Lumpkin & Dess (1996); Covin & Selvin, (1991); Knight (2000); Fang, et al. (2008); Gurbuz & Aykol (2009); Tang, et al (2007); Kreiser, et al.(2002); Bolton & Lane (2012)                                   |
| 37-45  | Entrepreneurial orientation       | 9               |   |
| <b>Part D: Business Performance</b>            |                                   |                 |   |
| 46-51  | Nascent venture's performance     | 6               | Gupta & Govindarajan (1984); Murphy & Kalawei (2004); Hafeez (2014); Zahra et al.(2002); Chandler & Hanks (1993); Shoham (1998); Zou et al. (1998); Wiklund & Shepherd (2005); Lechner & Gudmundsson (2014) |
| <b>Part E: Firm Information</b>                |                                   |                 |   |
| 52-59  | Firm Profile                      | 8               | Self-developed  |
| <b>Total items</b>                             |                                   | <b>59</b>       |   |

### **3.5 Measurement of variables**

All constructs in this study were measured using established measures drawn from previous studies. The measures of the construct for this study were adopted from a variety of sources. In order to avoid having low score in the reliability assessment, the measures of construct were based on the goodness of reliability from previous studies. The measurement of construct which is above the acceptable internal consistency score of 0.60 is considered as reliable to be used for the study. Below are descriptions of measurements of each construct for this study and the summary of measurements from the previous studies and the reliability scores of the constructs.

#### **3.5.1 Nascent Venture's Business Performance (NVP) measurement**

As discussed earlier in the Chapter two in business performance section, performance was measured using a set of subjective financial and non-financial indicators. This study focused on the nascent ventures which are owned by micro and small business owners. Naman and Slevin (1993) affirmed since small business owners are reluctant to reveal their business data, perceptual measures to assess firm performance were utilized. Firm performance is a complex and multidimensional construct (e.g., Chandler & Hanks, 1993). Therefore, the use of multiple indicators to gauge new venture performance has been recommended by several researchers (Zahra et al., 2002; Chandler & Hanks, 1993; Diamantopoulos, 1999; Katsikeas et al., 2000; Shoham, 1998; Styles, 1998; Zou et al., 1998; Wiklund & Shepherd, 2005; Lechner & Gudmundsson, 2014).

The study done by Lumpkin and Dess (1996) also used the multiple indicators in measuring firm performance. They are sales growth, profitability growth, market share, stakeholder's satisfaction and overall performance. Adopting from the work of Gupta and Govindarajan (1984), Murphy and Kalawei (2004), Hafeez (2014), measures business performance in his study to obtain the best result in examining the firm's achievement through multiple indicators. Referring to the work of Gupta and Govindarajan (1984) Murphy and Kalawei (2004), and Hafeez (2014), this study also adapted the same instruments in measuring the nascent ventures performance. Six items to operationalize nascent venture performance are sales growth, market share growth, operation profit, new product development, market development and stakeholder's growth and development where these items achieved internal consistency more than 0.70. Table 3.4 below exhibit items for nascent venture performance.

This study employed a self-report method for all adapted questionnaires items to measure the variables in this study. Self-report method has been widely used in social-personality psychology research where the method used this mode of assessment (Robins, Tracy & Sherman, 2007; Vazire, 2006). In other study, Paulhus and Vazire (2007) claimed that self-report method is often used because of the practicality and efficiency in getting large data from a large number of respondents.

Table 3.4  
*Nascent venture's business performance items*

| Item                                 | Cronbach's alpha |
|--------------------------------------|------------------|
| Sales growth rate                    | > 0.70           |
| Market share                         |                  |
| Operating profit                     |                  |
| New product development              |                  |
| Market development                   |                  |
| Stakeholders' growth and development |                  |

*Source.* Adapted from Gupta and Govindarajan (1984), Murphy and Kalawei (2004), and Hafeez (2014).

### 3.5.2 Entrepreneurial bricolage (EB) measurement

As discussed earlier in previous section of literature review, EB was popularized by Baker and Nelson (2005). They briefly described the measure of EB through the resources at hand, recombination of resources and making do dimensions. To date EB is recently developed quantitatively by few scholars (Senyard, et al., 2009; Senyard, et al., 2011; Gundry, et al., 2012; Salunke, et al., 2013; Gras & Nason, 2014; Ernst, et al., 2014; Davidsson, et al., 2017), this study adopted the previous work of senyard in developing questionnaire for entrepreneurial bricolage construct. Recent study by Davidsson, et al., (2017) produced the better version of bricolage items for quantitative study. However, there is no significance difference with the previous version by Senyard, et al., (2009). The original item developed by Senyard, et al., (2009) can be referred in appendix H.

Table 3.5  
*Entrepreneurial bricolage items*

| Item  | Cronbach's alpha |
|---|------------------|
| <b>Resources at hand</b>  |                  |
| We gladly take on a broader range of challenges than others with our resources would be able to.                                  |                  |
| We use any existing resource that seems useful to responding to a new problem or opportunity                                      |                  |
| We deal with new challenges by applying a combination of our existing resources and other resources inexpensively available to us | >0.8             |
| <b>Recombination of Resources</b>   |                  |
| When dealing with new problems or opportunities we take action by assuming that we will find a workable solution                  |                  |
| By combining our existing resources, we take on a surprising variety of new challenges  |                  |
| We combine resources to accomplish new challenges that the resources weren't originally intended to accomplish                    |                  |



---

**Making Do**

We deal with new challenges by applying a combination of our existing resources and other resources inexpensively available to us

When dealing with new problems or opportunities we take action by assuming that we will find a workable solution

When we face new challenges, we put together workable solutions from our existing resources

---

*Source.* Adopted from Senyard, et al., (2009).

### **3.5.3 Entrepreneurial orientation (EO) measurement**

The entrepreneurial orientation questionnaire developed by Covin and Slevin (1991) was used to measure the variables of entrepreneurial orientation of SME. Previous researchers (Covin & Selvin, 1991; Knight, 2000) have tested the reliability and validity of the entrepreneurial items. The internal consistency has found in average of 0.64 to 0.87 (Fang, Yuli & Hongzhi, 2008; Gurbuz & Aykol, 2009; Tang, Tang, Zhang & Li, 2007; Kreiser, Marino & Weaver, 2002; Knight, 2000). Entrepreneurial orientation can be measured through firm level or individual level. Bolton and Lane (2012) used the EO measures at individual level towards the entrepreneur's success. While most studies in entrepreneurship research measured EO at firm level. This study adopted the measures from Lumpkin and Dess (1996) as shown in appendix H which measured EO at firm level.

From five dimensions developed by Lumpkin and Dess (1996), only three dimensions achieved high internal consistency where the Cronbach's alpha is more than 0.7. In Bolton and Lane (2012) study, an assessment of the internal consistency of the initial scale items resulted in the consideration of the removal of two of the variables due to low Cronbach alpha at; autonomy (0.208) and competitiveness (0.585). This study used

three dimensions of entrepreneurial orientation developed by Lumpkin and Dess (1996) as showed in Table 3.6. In addition, these three dimensions also are widely used in previous studies as the main dimensions of EO construct (Wahid, 2011; Lee & Lim, 2009; Tarabishy et al, 2005; Hult, Hurley & Knight, 2004; Messeghem, 2003; Kreiser et al, 2002; Morris & Paul, 1987; Covin & Slevin, 1989; Miller, 1983).

Table 3.6

*Entrepreneurial orientation items*

| Item  | Cronbach's alpha |
|---|------------------|
| <b>Innovative</b>   | >0.7             |
| We emphasize more on new innovations and technology usage.  |                  |
| Our company offer new products/ services in the past few years.   |                  |
| We make an innovation to our products/ services rapidly.  |                  |
| <b>Proactive</b>  | >0.7             |
| We initiate first action in business before our competitor do.  |                  |
| We often to be first in introducing the products/ services or new technology/ marketing/ operation of the business. |                  |
| We usually are very competitive and will not let the competitors be at top.   |                  |
| <b>Risk-taking</b>  | >0.7             |
| We like to take bold action by venturing in a high business/projects.   |                  |
| We are willing to invest a lot of time and/or money on something that might yield a high return.                    |                  |
| We tend to act "boldly" in situations where risk is involved.   |                  |

*Source.* Adopted from Lumpkin & Dess (1996); Covin & Selvin, (1991); Knight (2000).

The measurement for entrepreneurial orientation will be treated as uni-dimensional.

The three dimensions of EO is best view as uni-dimensional study as the dimensions are correlated to each other as supported by Miller (1983, p780);

In general, theorists would not call a firm entrepreneurial if it changed its technology or product line ('innovated' according to our terminology) simply by directly imitating competitors while refusing to take any risks. Some proactiveness would essential as well. By the same token, risk-taking firms that are highly levered financially are not necessarily considered entrepreneurial. They must also engage in product-market or technological innovation.

In other studies, previous researchers also supported the use of EO construct in uni-dimensionally. Rauch, et al. (2009) suggested for future research to provide the concept of EO in uni-dimensional construct (Knight, 1997; Covin & Slevin, 1989). Previous studies also claimed that the use of uni-dimensional construct leads to the generalizability of EO (Brown, Davidsson & Wiklund, 2001; Wiklund, 1999; Knight, 1997). Table 3.6 above represents the entrepreneurial orientation items at firm level.

#### **3.5.4 Government assistance program (GAP) measurement**

Although the study on the government assistance program is widely discussed in previous studies, there is a lack of consistent measurements in evaluating the effectiveness of government assistance programs. McMullan et al. (2001) argue that there are many dimensions along which assistance programs that can be evaluated. The dimensions are; attendance and/or participation, participant satisfaction, program referrals and reputation, subjective assessments of overall program effectiveness, attributions of tangible and specific program benefits and subsequent performance of participants according to measures such as start-up propensity, survival, growth and profitability.

Previous studies have examined the effectiveness of a variety of assistance programs. Most have focused on evaluating programs from a cost-effectiveness perspective (Pelham, 1985; Chrisman et al., 1985; McMullan et al., 1986; Feller and Anderson, 1994) and from an economic impact perspective (Wood, 1994; McMullan et al., 1986; Solomon and Weaver, 1983; Nahavandi and Chesteen, 1988). The recent study done by Yusuf (2010) assesses start-up assistance programs using three dimensions; participation, entrepreneurs' satisfaction, and entrepreneurs' subjective assessments of

overall program effectiveness. In the Malaysian context of study, there were few studies that examined the effectiveness of government assistance programs. A preliminary study done by Hung and Effendi (2011) listed ten questions which have been asked to respondent on the effectiveness of government assistance program. The study did not provide the internal consistency of the items; however, the questionnaire is adapted from previous studies (Ghosh & Kwan, 1996; Morrison & Brennan, 2000).

In another study, “the effectiveness of public advisory services” conducted by Afandi Ahmad and Abd Latif (2012), they proposed four dimension of government assistance effectiveness. They are prompt service, communication skills, technology used and facility provided. With high internal consistency ranged from 0.720 to 0.877. Nevertheless, the dimensions are analyzed in multidimensional and the questionnaire is lengthy. Meanwhile, the study done by Zainol and Wan Daud (2011) proposed the instrument on government assistance programs with high internal consistency of 0.82. The instruments consist of government supports, training, research & development (R&D) institutions, financial assistance, and legal and institutional environment. In addition, the study also done in the context of indigenous entrepreneurs of Malaysia, align with the scope of this study in evaluating ‘malay’ nascent entrepreneurs in Malaysia. Table 3.7 provided the instrument for the construct of government assistance programs that adapt from Zainol and Wan Daud (2011). The wordings are changed to fit the need of study.

Table 3.7

*Government assistance program items*

| Item   | Cronbach's alpha |
|--|------------------|
| We get a lot of knowledge from the programs provided by government agency                  | 0.82             |
| The programs provided by government agencies offer clear policy information to us          |                  |
| We get a lot of technology assistance from the programs provided by government agency      |                  |
| It is easy for us to obtain loan from government agencies to support my business           |                  |
| The programs educated us to understand that the legal right of entrepreneurs is guaranteed |                  |
| Our business skill is improved after joined the programs offered by this agency            |                  |
| The programs educated us to understand that the interest of entrepreneurs is guaranteed    |                  |
| The tax policy for our firm is preferable  |                  |
| We easily find access for my business start-up capital.                                    |                  |

*Source.* Adopted from Zainol & Wan Daud (2011).

### 3.5.5 Online social networking adoption measurement

In the information system (IS) research, various studies indicate the measurement used to evaluate the user's technology adoption. From the previous studies, the used of UTAUT is commonly used to measure the level of adoption by user (Bakar, Razak & Abdullah, 2013; Sheng, et al., 2011; Muslim, Selamat & Ibrahim, 2007; Venkatesh and Bala, 2007; Venkatesh, et al., 2003). In TAM theory, the dimensions of ease of use, usefulness, attitude towards using, intention to use and actual behavior are used to measure how users come to accept and use the technology (Davis, 1989) while in UTAUT theory, Venkatesh, et al (2003) has extended the variables of technology adoption in eight variables to measure technology adoption by users. They are

performance expectancy, effort expectancy, and attitude toward using technology, social influence, facilitating conditions, self-efficacy, anxiety and behavioral intention to use the system.

For this study, the dimensions for online social networking adoption will adapted from Venkatesh, et al. (2003) and Sheng, et al. (2011). Performance expectancy, effort expectancy, social influences and attitude towards technology are adapted from Venkatesh, et al. (2003) to suit the need of this study. This study concern on the adoption behavior instead of intention to use, therefore the dimension of intention to use omitted in this study. Sheng, et al. (2011) in their study only adapted performance expectancy, effort expectancy, social influence, and facilitating dimension to measure the effect of online social networking adoption towards attribute-level performance.

These items were modified to follow the nature of the study. The performance expectancy, effort expectancy, social influence and attitudes towards technology items were reviewed from previous studies (Sheng, et al., 2011; Pinho & Soares, 2011; Zhou, 2011) which are adapted from Venkatesh, et al. (2003). The original items can be viewed in appendix H. From the preceding studies, it was reported that the internal consistency of these items is high, between 0.90 and 0.938 for performance expectancy, and between 0.86 and 0.898 for effort expectancy, (Zhou, 2011; Pinho and Soares, 2011).

While for social influence construct is made up from the four items where all of them are adapted from the original UTAUT (Venkatesh et al., 2003) and supported by other studies (Compeau, Higgins and Huff, 1999; Venkatesh and Morris, 2000; McCormick

and Martinko, 2004; Lee, Lee and Lee, 2006) since they have been used and validated in various technology adoption research. Social influence and attitude towards technology reported to have high internal consistency between 0.88 to 0.98 and 0.77 to 0.84 respectively (Venkatesh, et al., 2003). Table 3.8 below represents the items of online social networking adoption. For this study, the performance expectancy, effort expectancy, social influence and attitudes toward technology items are measured in uni-dimensional analysis to portray the online social networking adoption by nascent venture entrepreneurs.

Table 3.8

*Nascent venture entrepreneur's online social networking adoption items*

| Item  | Cronbach's alpha |
|---|------------------|
| <b>Performance expectancy</b>   | 0.90 – 0.938     |
| Online social networking is useful for our business.                            |                  |
| Using online social networking enables us to accomplish tasks quickly.          |                  |
| Using online social networking improves our business performance                |                  |
| <b>Effort expectancy</b>  | 0.86 – 0.898     |
| Online social networking is easy to use.  |                  |
| Our interaction with online social networking is clear and understandable.      |                  |
| It is easy for us to become skillful in using online social networking.         |                  |
| <b>Social influence</b>   | 0.88 – 0.98      |
| Our trading partners think we should use online social networking for business. |                  |
| Our employees think we should use online social networking for business.        |                  |
| In general, we supported the use of online social networking for business.      |                  |
| <b>Attitude toward using technology</b>   | 0.77 – 0.84      |
| Using online social networking for business is a good idea.                     |                  |
| Online social networking makes the business more interesting.                   |                  |
| We like to use online social networking for our business.                       |                  |

*Sources.* Adapted from Sheng, et al., (2011) and Venkatesh, et al., (2003).

### 3.5.6 Measurement Scales

The scales adopted in this questionnaire are nominal scale, multiple options scale and multiple rating lists. In the demographic section (personal background information and firm information), this section employed nominal and multiple option scale. For the research information section and venture performance section, multiple rating lists is employed. Prominent studies have constant debates on the most appropriate scale points in questionnaires (Cox, 1980; Lissitz & Green, 1975). While Bendig (1954) argues that the selection of different scales (between lower than higher point) does not substantially affect items reliability.

Dawes (2008) suggested that the different scale significantly improve the reliability of the measure. This happened when the researcher chosed to use five-point scale or seven points of scale instead of three point of scale. In similar vein, Elmore and Beggs (1975) noted minimal reliability improvement by increasing the measurement from five-point to seven-point or nine-point scales. Taken into account of previous arguments in choosing the scale, this study has employed the five-point scale to simplify the research instrument. The five-point likert scale is appropriate for this study as the targeted respondent is owner of the business or manager of the firm. According to Bencsik, Lore & Marosi (2009), less complicated measurement scale would enable the owner or manager to respond in the shortest time possible as they are the busiest person in the company.



### 3.6 Preliminary Study

Before the actual data collection was carried out, a preliminary work is necessary to validate and to re-establish part of research instruments before incorporating the instruments into the final research questionnaire. Measurement error is a common problem for research involving instrument. According to Hair, et al. (2010), measurement error refers to a situation when the actual data obtained do not reflect the intended conceptualization of the construct. All instrumentations to measure variables in this study are subjected to reliability and validity tests which conducted through two stages. First pretests and the second one is a pilot test. Cavana, et al. (2001) emphasized these tests is carried out to establish the validity and reliability of the instruments before conducting the actual questionnaires to the field and to minimize the measurement error.

Validity refers to the extent to which the measurement tool measures what it is intended to measure (Nunnally, 1978; Singleton & Straits, 1999). In other words, Mohamad (2012) explained the “validity test assesses whether the question imposed actually measure the intended construct not others” (p.176). It is concerned on how well the concept is defined by measure (s). The validity of measure is taken into account when it is free from any systematic and non-random error (Hair, et al., 2010). Several measures have been carried out to ascertain the content validity of the instruments. The content validity has been evaluated at the first stage of pre- testing. Zikmund (2003) stated that a scale has content validity after obtaining unanimous agreement among professionals. The validity of this instrument was ensured by reviewing literature in the field of entrepreneurial strategies, resources acquisition and firm performance. In

validating the instrument items, the author has identified relevant experts' groups to review and to refine the research items.

A group of entrepreneurship experts from local higher institutions and industrial representatives (selected SMEs owner/manager and PUNB researchers) are the two expert groups that have taken part in an instrument review process. The expert groups provide their level of agreement on the research items. The assessment is measured by a five-point scale with 1 refers to "strongly disagree" and 5 indicates "strongly agree" (Apigian, Ragu-Nathan, Ragu-Nathan & Kunnathur, 2005; Janom, Zakaria, Daud & Karim, 2009). An invitation letter has been sent through postal mail and electronic mail to 15 experts. After two weeks, 9 experts have responded to the assessment. A total number of 7 lecturers from Universiti Utara Malaysia (UUM), Universiti Teknologi Mara (UiTM) and Universiti Sultan Zainal Abidin (UNISZA) participates the assessment meanwhile the other two experts are from SOFTA Ocean Foods and Adeq Sue Resources Sdn. Bhd. Table 3.9 below presents selected expert and industry representatives' profile.

Table 3.9  
*Expert and Industry representatives' profile*

| <b>Positions</b>               | <b>N</b> |
|--------------------------------|----------|
| Associate Professor            | 2        |
| Senior Lecturer                | 2        |
| Lecturer                       | 3        |
| Industry Representatives       | 2        |
| <b>Academic Qualifications</b> |          |
| Doctoral Degree                | 4        |
| Master Degree                  | 3        |
| Bachelor Degree                | 2        |
| <b>Working Experience</b>      |          |
| More than 15 years             | 4        |
| 10 – 15 years                  | 2        |

|                             |   |
|-----------------------------|---|
| 6 – 9 years                 | 2 |
| 2 – 5 years                 | 1 |
| <b>Gender</b>               |   |
| Male                        | 3 |
| Female                      | 6 |
| <b>Expert's Age</b>         |   |
| 56 years and above          | 3 |
| 46 years old – 55 years old | 3 |
| 36 years old – 45 years old | 2 |
| 25 years old – 35 years old | 1 |

Nine responses received from the experts and industry representatives were considered as adequate to evaluate the pre-testing procedure. Feedback and evaluation from the experts were analyzed and amended as Table 3.10 below;



Table 3.10

*Expert's feedback and ammendment of pre-testing procedures*

| Feedback  | Remedial Action  |
|---|--|
| The questions too lengthy and not easy for entrepreneurs to understand.                       | Make the questionnaire simple and easy words by replacing entrepreneurial terms through explaining it in different words.  |
| Review items of business performance. It is not suitable to view nascent venture performance. | Omitted the items of (1) <i>return of investment</i> and (2) <i>research &amp; development activity</i> as it not covers the activity of nascent venture.  |
| Review items of online social networking adoption.  | Omitted the item of (1) <i>If we use online social networking, we will increase the chances of increase our business performance</i> . This item was omitted as the respondents already an adopter of online social networking for their business. Meanwhile, items (2) <i>learning to operate online social networking is easy for me</i> , (3) <i>I like using online social networking</i> and (4) <i>In general, the ventures has supported the use online social networking for business purposes</i> , were reviewed as general items for each dimension. Therefore, we decide to omitted these items. |

### 3.7 Pilot Study

As the questionnaires developed were subject to validity and reliability test, a pilot test was conducted on few ventures. According to Neuman (1997), a pilot study is important because it improves the questionnaires. It is used to detect weaknesses in design and instrumentation and to provide proxy data for selection of a probability sample (Cooper & Schindler, 2001). According to Emory and Cooper (1991), respondents of 25-100 are appropriate for a pilot study. The results of the pilot study should identify misunderstandings, ambiguities and useless items (Wiersma, 1993). According to Nunnally's (1978), by conducting the pilot test, it recommends that subjective assessments can be made through survey instruments to ensure questions are understandable, and scale items represent the underlying constructs of interest. In avoiding the return questionnaires achieves the target answered, the group of respondents for pilot study comes from the same database for sample size selection.

Pilot study has been conducted on December 2014. As discussed in the previous section, 700 nascent ventures were drawn from SSM database by applying a systematic sampling by selecting the ventures in database at each 2<sup>nd</sup> element. From 700 samples, 100 were selected for pilot study purposes. Data collection method for pilot test also using online survey questionnaire. Apart from predicting survey response rate, pilot testing facilitates assessment of the instrument's accuracy and reliability (Straub, 1989). For this reason, the pilot testing respondents should closely represent the actual respondents (Oppenheim, 1992). From 100 respondents, 69 entrepreneurs of nascent ventures responded the online survey. The reliability scores for pilot study summarized as Table 3.11 below.

Table 3.11  
*Reliability scores of pilot study*

| Variables                                 | Items Number | Cronbach Alpha |
|---|--------------|----------------|
| Nascent Venture Business Performance (BP) | 6            | 0.872          |
| Entrepreneurial Bricolage (ESEB)          | 8            | 0.785          |
| Entrepreneurial Orientation (ESEO)        | 9            | 0.751          |
| Government Assistance Program (RAGAP)     | 9            | 0.906          |
| Online Social Networking Adoption (RAOSN) | 12           | 0.954          |

Note.  $N = 69$ .

After pilot study was carried out, the actual data collection process took place. The remaining of 700 samples for distribution, 600 respondents (700 – 100 samples for pilot study) were contacted through phone and email to answer the online survey questionnaire. The actual data collection process took place on the beginning March 2015. The actual data collection having the same problem with pilot study, where there were dawdling responses from respondents. In the early beginning of data collection was carried out, only 25 respondents (pilot study) responded the online survey and 78 respondents for actual study. Second reminder through phone and email were sent to increase the response rate.

Following previous studies in improving responses rate, providing appropriate incentive to the respondent would improve response rate (Brennan & Charbonneau, 2009; Dillman, 2007). The incentive can be in tangible forms e.g. cash, token or lucky draw as well as intangible forms e.g. offering an extended research summary (Paxson, 1995; Levenburg & Magal, 2005). Nevertheless, monetary or physical incentives are less effective to executives or managerial level respondents (Cycyota & Harrison, 2002). In view of the overheads constraint, this study offers the respondents an extended executive summary.

Table 3.12 tabulates the analysis of the questionnaire distribution and responses received. Similar to some earlier works, undelivered mailed questionnaires are relatively high (Dembla et al., 2007). This is partly because of high frequency of changing contact information among firms' due to cease of operation or employee's turn over (Paxson, 1995; Vivekanandan & Rajendran, 2006). After about five months, there are only 223 available responses for analysis. Nevertheless, 39 responses are excluded for further analysis due incomplete responses, inappropriate samples, or firms claimed to be non-adopters. Removal of invalid responses has left the final usable responses to 184 nascent ventures. It is common practice for studies involving SMEs to remove respondents with defunct mailing addresses in determining the response rate (Magal et al., 2008; Pflugheoft et al., 2003). Therefore, the effective response rate for this study is about 31.9% (184 usable responses from 576 questionnaires distributed).

Table 3.12  
Response rate for actual and pilot study

| Descriptions  | Actual study | Pilot study | Response rate (%) |             |
|---|--------------|-------------|-------------------|-------------|
|   |              |             | Actual            | Pilot       |
| Questionnaires sent   | 600          | 100         |                   |             |
| Undelivered mails:  |              |             |                   |             |
| Incorrect addresses/respondents   | (24)         | (9)         | 4.0               | 9.0         |
| Revised number of samples   | 576          | 91          |                   |             |
| Responses received  | <b>223</b>   | 81          | 38.7              | 89.0        |
| Unusable response (incomplete responses, inappropriate respondents, non-adopters) | (39)         | (12)        |                   |             |
| <b>Total usable responses</b>   | <b>184</b>   | <b>69</b>   | <b>31.9</b>       | <b>75.8</b> |

### 3.7.1 Data collection procedures

There were various methods to distribute questionnaires. The best method choose by the researchers will lead to the favorable return of questionnaires. Yun and Trumbo (2000) proved that they managed to get about 72 percent of responses rate by using the combination of method in mail survey. However, in Malaysian context of study, using electronic mail survey is reported to have low response rate. Study done by Aziz (2010) reported to receive response rate at 20.2 percent using electronic mail while in Raemah (2011) obtained a lower rate at 15 percent. Taking into account the cost constraint and its ability to reach targeted respondents across wide geographic areas (Singleton & Straits, 1999), this study has considered an online survey questionnaire as the data collection mode.

As such, in relation to the low or conflicting response rate for electronic mail survey among SMEs in Malaysia, two sets of online survey questionnaires were setup through kwiksurveys.com. online survey or web-based survey as suggested by Kroth et al., (2009), Dillman, Smyth and Christian (2009), Shih and Fan (2007) and Groves et al., (2004) were recommended as this technique has a high response rate. From DSS research (2000) found that internet survey provides comparable results to traditional mail survey as both methods have the same internal reliability of Cronbach's alpha 0.87 and internal consistencies of items over 0.80 on Guttman split-half. Meanwhile, a meta-analysis study by Cook, Heath, Thompson and Thompson (2001) shows web-based survey gave good response rate averaging 36.9 percent.

The questionnaire was prepared in English and then translated into Malay Language version in order to encourage the respondents' participation and then, to reach expected



outcome. To ensure the accuracy of the translation, a back-to-back translation was completed to check for any inconsistencies or possible translation errors. Using the templates provide by Kwiksurveys.com, English version questionnaire was linked at <https://kwiksurveys.com/s/2byuv2iydbjnbrn507449> meanwhile Malay version was linked at <https://kwiksurveys.com/s/9gAnzXee>. Respondents were asked to participate the survey through a phone called and consent form were sent to their company email address. The owner or manager of the firm must answer the questionnaire by themselves. A follow-up procedure had been conducted in order to increase the response rate.

A better response rate for email survey can be achieved if respondents are notified in advance on the forthcoming survey (Sekaran, 2003). As such, a mailing procedure as recommended by Salant and Dillmant (1994) was used. However, with some financial constraints and limitation of time, only the first three of four-step procedure were followed with some adjustments:

1. A personalised advance-notice letter was sent to each respondent to inform them of the survey and upcoming questionnaire. However, in many cases the respondents were reached by phone and/or email.
2. A week after the first contact, a personalised cover letter with a link of both version questionnaire were mailed to each of the respondents' email address. In some cases, the questionnaire was immediately sent to the respondents email after contacting and confirming them.

3. A week after sending the questionnaire link, a follow-up (by phone and/or email) to respondents was done to confirm the acceptance of the questionnaire and remind them to complete it. In some cases, the follow-up was done several times up until the due date of survey.

After completing the online survey, respondent was asked to update their new address and offered a copy of survey results by ticking the (yes/no) box in the last part of online questionnaire survey. The findings of result were sent through email and postal mail upon request of respondents. The printed version of online survey questionnaire can be viewed in the appendix I.

### **3.8 Actual Study**

#### **3.8.1 Data Screening and Cleaning**

Data screening process will be performed before pursuing further statistical analysis to explore the characteristics of the data in order to verify the accuracy of data, extreme responses, missing data, pattern of the missing data, and whether the data meet the statistical assumptions (Tabachnick & Fidell, 2001). Therefore, all data in this study will be subjected to analysis of non-response bias, missing case, outliers, normality, linearity, homoscedasticity and multicollinearity evaluation as suggested by Hair, et al. (2010) and Pallant (2007). In addition, to determine how many latent variables underlie a set of items for this study, factor analysis is employed and discussed in later subsection of validity and reliability. Meanwhile, after discussions of validity and reliability of the actual study, the discussions on multivariate assumptions (normality, linearity,

homocedasticity and multicollinearity) analyses take place in subsection techniques of data analysis.

#### **3.8.1.1 Non-response bias**

Non-response bias is vital in survey research because it can invalidate results of the survey by preventing the generalization of results from the sample to targeted population. Non-response error refers to the inability to get information from the respondents. For example, difficulty in contacting the respondents, or respondents' refusal to take part in the survey may be possible reasons for not responding (Yehuda, 1999). Malhotra, Hall, Shaw and Oppenheim (2006) stressed that the differences between early and late respondents can seriously affect the results of a given study. With no nonresponse bias, the samples are suggested to infer the population from where they are taken from (Sturgis, 2006).

As the literature suggests, non-response bias can be estimated with the time trends by comparing early and late responses since the behaviour of those who respond late to the survey may resemble those who did not respond at all (Ahmed, 2011; Armstrong & Overton, 1977). For this study that used online survey method, two to four weeks between sending and receiving the questionnaires should be reasonable enough to be considered as early response times. For comparison, two weeks were considered as early response times for electronic mail distribution (Hafeez, 2016). Table 3.13 shows the summary of statistics between early and late categories.

Table 3.13  
Comparing Early and Late Response Categories

| Responses type | Frequency  | Percentage (%) |
|----------------|------------|----------------|
| Early response | 78         | 42             |
| Late response  | 106        | 58             |
| <b>Total</b>   | <b>184</b> | <b>100</b>     |

As shown in the table, the frequencies of responses between early and late categories are almost equal in size that is 78 (42%) for early response group and 106 (58%) for late response group. This statistic is suggesting the number of respondents who responded within two weeks after questionnaire sent has not much different from those who responded after two weeks, which is a good sign for comparison purpose. As such, these equal numbers of responses between early and late categories allow a test for nonresponse bias to be performed with sufficient sample size.

In order to find out any significant differences between early and late respondents, independent sample T- test was carried out to test non-response bias. This test is performed to determine if the two groups of samples (e.g., early and late) are coming from the same population (Nachar, 2008; Pfaffenberger & Patterson, 1981). As shown in Table 3.14, it was found that the significance values of all variables that ranged from 0.104 to 0.668 have well exceeded the significance level of 0.05. This result shows the distribution of all five variables is similar across early and late response categories that imply the nonresponse bias does not exist in this study.

Table 3.14  
*Result of Non-Response Bias Test*

| Variable                             | T-Value | Significance |
|--------------------------------------|---------|--------------|
| Nascent Venture Business Performance | .668    | -.709        |
| Entrepreneurial Bricolage            | .208    | .910         |
| Entrepreneurial Orientation          | .261    | -.558        |
| Government Assistance Program        | .125    | -.537        |
| Online Social Networking Adoption    | .104    | -.690        |

### **3.8.1.2 Missing case**

Hair et al. (2006) suggested that missing data is the information which is not available for a case about whom other information is available. In particular, missing data exists due to the errors in data collection or data entry or from the omission of answers by respondents (Hair et al., 2006, 2010; Pallant, 2007). Additionally, missing data also must be addressed, regardless of the reason, since it can also seriously bias the conclusions drawn from an empirical study (Byrne, 2010). Therefore, at this stage, any incomplete questionnaires received from the respondents should be judged as unusable and would be disposed (Hair et al., 2006, 2010).

Upon performing the screening of data in this study, frequency distribution and missing value analysis for every variable had been carried out to detect any missing responses. According to this, all the returned questionnaires were found to be no missing response. Appendix J represent the result of findings missing case analysis. The process of data screening was preceded to the next step which was the detection for outliers.

### **3.8.1.3 Outlier**

Outlier refers to the data that has clearly deviated away from the others in sample (Grubbs, 1969). The presence of outliers can be simply caused by human error, such as during data entry (Tabachnick & Fidell, 2007), or because it comes from a different population (Grubbs, 1969). Outlier can also be part of the population itself, but it simply has more extreme value than normal distribution (Tabachnick & Fidell, 2007). Since human error is assured not to exist in this study, any presence of outliers was genuinely because of the latter reasons. This study employed the Mahalanobis distance (D2) method to detect outliers, as suggested by Tabachnick and Fidell (2007, 2013).

Mahalanobis D2 is a multidimensional version of a z-score, which measures the distance of a case from the centroid (multidimensional mean) of a distribution, given the covariance (multidimensional variance) of the distribution (Tabachnick & Fidell, 2007, 2013). Hence, in this study, outliers were examined through Mahalanobis distance (D2) by looking into the box plots as suggested by Pallant (2007). The result showed that there is one extreme case of outlier (see appendix J, page. 357) detected in case 25. In order to ascertain the extreme value of unusual multivariate outliers, the inspection of Mahalanobis distance has identified the residual values of -5.74815, which is exceed the va Since the extreme value is high, it came to conclusion that we deleted case 25. A repetitive outliers analysis was done to ascertain no other extreme values after deleting case 25.

### **3.9.3 Factor analysis**

Factor analysis will determine if the measures or items are loaded on the appropriate factors as identified by previous researchers (Venkatraman, 1989). The purpose of factor analysis was not only to validate all the scales in this study, but also to assess the degree to which the data met the expected structure of the study. Only the factor loading scores with an acceptable value are considered significant in describing the factor. Hair, Anderson, Tatham and Black (1998) suggested factor loadings greater than 0.30 are considered to meet the minimal level, loadings of 0.40 are considered more important, and if the loadings are 0.50 or greater, they are considered practically significant. However, Tabachnick and Fidell (2001) stated that the choice of the cutoff for loading size is the preference of the researcher. Based on this guideline, a loading of 0.40 and greater was considered as significant factor for this study. The data in this study were

initially submitted for exploratory principal component factoring (PC) with varimax rotation by means to simplification of a large number of items to a few representative factors or dimensions, to test the patterns of correlation among the items of variables, and to establish the goodness of measures for testing the hypotheses (Hair, et al., 1998; Tabachnick & Fidell, 2007).

In addition, several statistical assumptions of factor analysis were taken into consideration in judging the goodness of measures. First, the values of Measure of Sampling Adequacy (MSA) for item should be above 0.50 (Hair, et al., 2006). Second, the Kaiser-Meyer-Olkin (KMO) values must be greater than 0.60 (Blaikie, 2003). Third, the Bartlett's test of Sphericity should be significant at  $p < 0.05$  to present the adequacy of the correlations among variables (Ho, 2006). Fourth, to determine the number of factors to be extracted, the two most commonly used technique as suggested by Hair, et al. (1998; 2006) and Tabachnick and Fidell (2007) were taken into consideration. First technique is through the evaluation of eigen value. The value must be greater than 1, factors which have value less than 1 should be discarded. Second technique is by the inspection of the scree test plot shape. A cutoff point at which the pattern of the curve changed to nearly horizontal line indicated the optimum number of factors to be extracted (Hair, et al., 1998; Hair, et al., 2006; Tabachnick & Fidell, 2007).

Fifth, according to Hair, Anderson, Tatham and Black (1995) the factor loadings greater than  $\pm 0.30$  are considered as minimum loadings,  $\pm 0.40$  are considered as more important, and loadings of  $\pm 0.50$  or greater considered as significant. Meanwhile, Comrey and Lee (1992) suggested loadings of 0.71 and above is considered as excellent, 0.62 is very

good, 0.55 is good, 0.45 is fair and 0.32 is considered as poor. Referring the guidelines from Tabachnick and Fidell (2007), this study used a cutpoint of 0.40 and greater were considered as significant factor loadings. Table 3.15 shows the summary of the measures of appropriateness of factor analysis.

Table 3.15  
*Measures of Appropriateness of Factor Analysis*

| Item                               | Range           |
|------------------------------------|-----------------|
| Kaiser-Meyer-Olkin (KMO)           | >0.5            |
| Measure of Sampling Adequacy (MSA) | >0.5            |
| Bartlett's Test of Sphericity      | <0.05 (p-value) |
| Eigenvalue                         | >1.0            |
| Factor Loadings                    | >0.4            |
| Communalities                      | >0.5            |
| Anti-image                         | >0.5            |

*Source:* adopted from Hutcheson and Sofroniou (1999), Hair et al., (2006, 2010), Ho (2006), Tabachnick and Fidell (2007, 2013).

After considering the satisfactory measures appropriateness of factor analysis, the evaluation of retaining and removal of items were lies in mininum rule of thumb item removal. Because of principal component analysis is very nifty (Abdi & Williams, 2010). It can be used for reducing the number of items (Matsunaga, 2010) that is redundant or unnecessary (Rattray & Jones, 2007). The disordered items which are caused the loading table to be not interpretable (Costello & Osborne, 2005) can be considered for removal if they have poor-loading (or weak) value, wrong-loading (or unnecessary) value, and/or cross-loading (or redundant) value (Indu, Remadevi, Vidhukumar, Anilkumar, & Subha, 2011). Instead, Pallant (2007) agreed on removal of items can also be considered if the communalities value of the item is below 0.3. While the decision to retain and remove items is subjective, a certain degree of judgment is needed in the procedure (Matsunaga, 2010). Since principal component



analysis usually produces low loading value (Park, Dailey, & Lemus, 2002), the minimum rule-of-thumb for item removal is applied, which are discussed as follows;

#### 1) Removing Poor-loading (or weak) Items

Items should be retained if “each of the variables [or items] loading strongly on only one component, and each component being represented by a number of strongly loading variables [or items]” (Pallant, 2007, p. 183). In this case, the rule-of-thumb is to retain items with loading value of 0.4 and above (Matsunaga, 2010) in the Rotated Component Matrix. Since loading value of 0.3 is also recommended (Blaikie, 2003), this value will be used in the (Unrotated) Component Matrix. In other words, items with loading value of less than 0.4 in Rotated Component Matrix and/or less than 0.3 in Component Matrix can be considered as poor-loading items and they should be considered for removal.

#### 2) Removing Cross-loading (or redundant) Items

Items should also be retained if they “load clearly and strongly onto one component/factor while showing small to nil loadings onto other components/factors” (Matsunaga, 2010, p. 101). In this case, retaining items can be considered if the discrepancies of cross-loading value between factors is not less than 0.2 (Sun & Wang, 2009) such as 0.6/0.4 ( $0.6 - 0.4 = 0.2$ ), which is not uncommon in previous studies (Matsunaga, 2010). Therefore, cross-loading items with discrepancy value of less than 0.2 should be considered for removal.

#### 3) Removing Wrong-loading (or unnecessary) Items

Since “the resultant pool should contain only items that tap theoretically meaningful and interpretable factors, but not those that reflect insubstantial noises or measurement/sampling errors”, removal of items can also be considered if they have

no factor loading or loading on the wrong factor. In other words, items can be removed if it does not emerge as expected (Matsunaga, 2010, p. 103).

For ease of interpretation, NV Performance, Entrepreneurial Strategies (EB and EO) and Resources Acquisition of GAP and OSN were factor analysed separately as they are different categories of variables. In other words, as they are multidimensional to be factor analysed simultaneously, it is common to divide them into subtests (Osterlind, 2010). Meanwhile, since factor analysis is a complex, multi-step (Costello & Osborne, 2005), and iterative processes (Rattray & Jones, 2007) that should be repeated after removal of items (Pallant, 2007), only the final outputs are discussed here. Following are discussions of the outputs from this analysis.

### 3.9.3.1 Factor analysis on Nascent Venture Performance

The measurement scales for nascent venture performance consisted of 6 items. A varimax rotated principal components factor analysis was then conducted on these 6 items. Here, only loadings of at least 0.40 were included and as a result, only one factor was extracted for this variable. Table 3.16 presents the result of this analysis.

Table 3.16  
*Factor analysis on Nascent Venture Performance*

| Description of Items                            |                                 | Component |
|---|---------------------------------|-----------|
| BP1   | Sales growth rate               | .716      |
| BP2   | Market share                    | .728      |
| BP3   | Operating profits               | .740      |
| BP4   | New product development         | .645      |
| BP5   | Market development              | .746      |
| BP6   | Employee growth and development | .753      |
| Eigenvalue                                      |                                 | 3.130     |
| Percentage variance                             |                                 | 52.173    |
| Kaiser Meyer Olkin Measure of Sampling Adequacy |                                 | .849      |
| Bartlett's Test of Sphericity                   |                                 |           |
| Approx. Chi-Square                              |                                 | 312.090   |

|      |      |
|------|------|
| DF   | 15   |
| Sig. | .000 |

From Table 3.16, Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for the items were 0.849, showing that the items were correlated and shared common factors. Test of Sphericity was also found to be significant at  $p < 0.001$ , with the Approx. Chi-Square value of 312.090, indicating the appropriateness of the correlations among the variables and thus provide a sufficient basis for factor analysis (Ho, 2006). Meanwhile, the MSA values for individual items ranged from 0.817 to 0.869 also denoted that the data matrix was suitable for factor analysis. Besides that, the factor analysis resulted in one factor with eigenvalue greater than 1 (3.130) that explained 52.173 per cent of variance in the data. Factor loading for items in this factor ranged from 0.645 to 0.753.

### 3.9.3.2 Factor analysis on Entrepreneurial Bricolage

The measurement scale for entrepreneurial bricolage consists of 8 items. After factor analysis was run, the initial result of factor analysis as depict in appendix J. There were two items was removed because of wrong loading. Matsunaga (2010) considered items can be removed if it does not emerge as expected. Thus, item 7, “*when we face new challenges we put together workable solutions from our existing resources*” and item 8, “*we combine resources to accomplish new challenges that the resources weren’t originally intended to accomplish*” were removed as following the rule of thumb for item removal.

Table 3.17

*Factor analysis on Entrepreneurial Bricolage*

| <b>Description of Items</b>                     |  | <b>Component</b> |
|---|--|------------------|
| ESEB1   | We are confident of our ability to find workable solutions to new challenges by using our existing resources.                      | .648             |
| ESEB2   | We gladly take a broader range of challenges than others with all our resources.   | .722             |
| ESEB3   | We use existing resources that seems useful to responding to a new problem or opportunity.   | .811             |
| ESEB4   | We deal with new challenges by applying a combination of our existing resources and other resources inexpensively available to us. | .685             |
| ESEB5   | When dealing with new problems and opportunities we take action by assuming that we will find a workable solution.                 | .609             |
| ESEB6   | By combining our resources, we take on a surprising variety of new challenges.   | .735             |
| Eigenvalue                                      |  | 2.977            |
| Percentage variance                             |  | 49.616           |
| Kaiser Meyer Olkin Measure of Sampling Adequacy |  | .789             |
| Bartlett's Test of Sphericity                   |  |                  |
| Approx. Chi-Square                              |  | 308.463          |
| DF  |  | 15               |
| Sig.  |  | .000             |

The later result of factor analysis for entrepreneurial bricolage showed in table 3.17. after rerun the analysis by removing problematic items (item 7 and 8), Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for the items were 0.789, showing that the items were correlated and shared common factors. Test of Sphericity was also found to be significant at  $p < 0.001$ , with the Approx. Chi-Square value of 308.463, indicating the appropriateness of the correlations among the variables and thus provide a sufficient basis for factor analysis (Ho, 2006). Meanwhile, the MSA values for individual items ranged from 0.752 to 0.807 also denoted that the data matrix was suitable for factor analysis. Besides that, the factor analysis resulted in one factor with eigenvalue greater than 1 (2.977) that explained 49.616 per cent of variance in the data. Factor loading for items in this factor ranged from 0.609 to 0.811.

### 3.9.3.3 Factor analysis on Entrepreneurial Orientation

The measurement scales for EO consisted of 9 items. The innovativeness was measured using three items, proactiveness was measured using three items, and riskiness was measured by three items. A varimax rotated principal components factor analysis was then conducted on these 9 items. Prior to performing the principal components analysis (PCA), the suitability of the data for factor analysis was assessed. Only loadings of at least 0.30 were included in the factor (Hair et al., 2006, 2010).

From Table 3.18 below, the total variance explained is reported as 71.235 per cent. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for the items were 0.708, exceeding the recommended value of 0.6 (Kaiser, 1974), and thus interpreted as in the range of “fair” (Hutcheson & Sofroniou, 1999). Barlett’s Test of Sphericity was also found to be significant at  $p < 0.001$ , with the Approx. Chi-Square value of 572.031, indicating the appropriateness of the correlations among the variables and thus provide a sufficient basis for factor analysis (Ho, 2006). Meanwhile, the MSA values for individual items ranged from 0.582 to 0.810 also denoted that the data matrix was suitable for factor analysis.

Table 3.18  
*Factor analysis on Entrepreneurial Orientation*

| Description of Items |   | Component |          |          |
|----------------------|---|-----------|----------|----------|
|                      |   | Factor 1  | Factor 2 | Factor 3 |
| ESEO1                | We emphasize more on new innovations and technology usage.      |           |          | .893     |
| ESEO2                | Our company offer new products/ services in the past few years. |           |          | .813     |
| ESEO3                | We make an innovation to our products/ services rapidly.        |           |          | .728     |

|   |   |        |         |        |
|---|---|--------|---------|--------|
| ESEO4   | We initiate first action in business before our competitor do.  |        | .858    |        |
| ESEO5   | We often to be first in introducing the products/ services or new technology/ marketing/ operation of the business. |        | .882    |        |
| ESEO6   | We usually are very competitive and will not let the competitors be at top.   |        | .713    |        |
| ESEO7   | We like to take bold action by venturing in a high business/projects.   | .812   |         |        |
| ESEO8   | We are willing to invest a lot of time and/or money on something that might yield a high return.                    | .879   |         |        |
| ESEO9   | We tend to act “boldly” in situations where risk is involved.   | .848   |         |        |
| Eigenvalue                                      |   | 2.274  | 2.104   | 2.033  |
| Percentage variance                             |   | 25.269 | 23.375  | 22.591 |
| Kaiser Meyer Olkin Measure of Sampling Adequacy |   |        | .708    |        |
| Bartlett's Test of Sphericity                   |   |        |         |        |
| Approx. Chi-Square                              |   |        | 572.031 |        |
| DF  |   |        | 36      |        |
| Sig.  |   |        | .000    |        |

Consequently, the factor analysis resulted in three factors with eigenvalue greater than 1 that explained 71.235 per cent of variance in the data. The first factor accounted for 22.591 per cent of the total variance with an eigenvalue of 2.033. Factor loadings for items in this factor ranged from 0.728 to 0.893. Factor 1 reflected the innovativeness dimension and therefore, named as innovativeness. The second factor was consisted of three items and factor loadings ranged from 0.713 to 0.882 which accounted for 23.375 per cent of the total variance in the data. The eigenvalue was 2.104. Factor 2 are related to proactiveness and therefore, classified as proactiveness. Finally, the third factor was also represented by three factors. Factor loadings were ranged from 0.812 to 0.879. This factor accounted for 25.269 per cent of the total variance with an eigenvalue of 2.274. Factor 3 reflected the risk-taking dimension and accordingly, classified as riskiness.

#### 3.9.3.4 Factor analysis on Government Assistance Program

The measurement scale for government assistance program consists of 9 items. After factor analysis was run, the initial result of factor analysis as depict in appendix J. There were two items was removed because of wrong loading. Matsunaga (2010) considered items can be removed if it does not emerge as expected. Thus, item 1, “*we get a lot of knowledge from the programs provided by government agency*” and item 8, “*the tax policy for our firm is preferable*” were removed as following the rule of thumb for item removal.

The later result of factor analysis for government assistance program showed in table 3.19. after rerun the analysis by removing problematic items (item 1 and 8), Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for the items were 0.918, showing that the items were correlated and shared common factors. Test of Sphericity was also found to be significant at  $p < 0.001$ , with the Approx. Chi-Square value of 795.961, indicating the appropriateness of the correlations among the variables and thus provide a sufficient basis for factor analysis (Ho, 2006). Meanwhile, the MSA values for individual items ranged from 0.902 to 0.941 also denoted that the data matrix was suitable for factor analysis. Besides that, the factor analysis resulted in one factor with eigenvalue greater than 1 (4.685) that explained 66.934 per cent of variance in the data. Factor loading for items in this factor ranged from 0.739 to 0.867.

Table 3.19

*Factor analysis on Government Assistance Program*

| Description of Items |   | Component |
|----------------------|---|-----------|
| RAGAP2               | The programs provided by government agencies offer clear policy information to us | .797      |

|   |  |         |
|---|--|---------|
| RAGAP3  | We get a lot of technology assistance from the programs provided by government agency      | .784    |
| RAGAP4  | It is easy for us to obtain loan from government agencies to support my business           | .842    |
| RAGAP5  | The programs educated us to understand that the legal right of entrepreneurs is guaranteed | .867    |
| RAGAP6  | Our business skill is improved after joined the programs offered by this agency            | .860    |
| RAGAP7  | The programs educated us to understand that the interest of entrepreneurs is guaranteed    | .831    |
| RAGAP9  | We easily find access for my business start-up capital.                                    | .739    |
| Eigenvalue                                      |  | 4.685   |
| Percentage variance                             |  | 66.934  |
| Kaiser Meyer Olkin Measure of Sampling Adequacy |  | .918    |
| Bartlett's Test of Sphericity                   |  |         |
| Approx. Chi-Square                              |  | 795.961 |
| DF  |  | 21      |
| Sig.  |  | .000    |

### 3.9.3.5 Factor analysis on Online Social Networking

The measurement scale for entrepreneurial bricolage consists of 12 items. After factor analysis was run, the initial result of factor analysis as depict in appendix J. There were two items was removed because of wrong loading. Matsunaga (2010) considered items can be removed if it does not emerge as expected. Thus, item 4, “*online social networking is easy to use*” and item 12, “*we like to use online social networking for our business*” were removed as following the rule of thumb for item removal.

Table 3.20  
*Factor analysis on Online Social Networking*

| Description of Items |  | Component |
|----------------------|--|-----------|
| RAOSN1               | Online social networking is useful for our business.                       | .612      |
| RAOSN2               | Using online social networking enables us to accomplish tasks quickly.     | .676      |
| RAOSN3               | Using online social networking improves our business performance           | .587      |
| RAOSN4               | Online social networking is easy to use.                                   |           |
| RAOSN5               | Our interaction with online social networking is clear and understandable. | .783      |
| RAOSN6               | It is easy for us to become skillful in using online social networking.    | .682      |



|   |   |         |
|---|---|---------|
| RAOSN7  | Our trading partners think we should use online social networking for business. | .749    |
| RAOSN8  | Our employees think we should use online social networking for business.        | .693    |
| RAOSN9  | In general, we supported the use of online social networking for business.      | .765    |
| RAOSN10   | Using online social networking for business is a good idea.                     | .673    |
| RAOSN11   | Online social networking makes the business more interesting.                   | .796    |
| RAOSN12   | We like to use online social networking for our business.                       |         |
| Eigenvalue                                      |   | 4.967   |
| Percentage variance                             |   | 49.666  |
| Kaiser Meyer Olkin Measure of Sampling Adequacy |   | .907    |
| Bartlett's Test of Sphericity                   |   |         |
| Approx. Chi-Square                              |   | 749.602 |
| DF  |   | 45      |
| Sig.  |   | .000    |

The later result of factor analysis for online social networking showed in table 3.20. after rerun the analysis by removing problematic items (item 4 and 12), Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for the items were 0.907, showing that the items were correlated and shared common factors. Test of Sphericity was also found to be significant at  $p < 0.001$ , with the Approx. Chi-Square value of 749.602. Meanwhile, the MSA values for individual items ranged from 0.870 to 0.941 also denoted that the data matrix was suitable for factor analysis. Besides that, the factor analysis resulted in one factor with eigenvalue greater than 1 (4.967) that explained 49.666 per cent of variance in the data. Factor loading for items in this factor ranged from 0.587 to 0.796. From factor analysis, 44 items of nascent venture performance, entrepreneurial bricolage, entrepreneurial orientation, government assistance program and online social networking, 6 of items were removed due to wrong loading. Two items from entrepreneurial bricolage (item 7 and 8), 2 items from government assistance program (item 1 and 8) and 2 items from online social networking (item 4 and 12). Table 3.21 summarized usable items after factor analysis.

Table 3.21  
Usable items after factor analysis

| Variable Name                             | Variable items  | Deleted items after factor analysis | Usable items  |
|---|---|-------------------------------------|---|
| Nascent Venture Business Performance (BP) | BP1, BP2, BP3, BP4, BP5, BP6<br>(6 items)   | NONE                                | BP1, BP2, BP3, BP4, BP5, BP6<br>(6 items)   |
| Entrepreneurial Bricolage (ESEB)          | ESEB1, ESEB2, ESEB3, ESEB4, ESEB5, ESEB6, ESEB7, ESEB8<br>(8 items)   | ESEB7, ESEB8<br>(2items)            | ESEB1, ESEB2, ESEB3, ESEB4, ESEB5<br>ESEB6<br>(6 items)   |
| Entrepreneurial Orientation (ESEO)        | ESEO1, ESEO2, ESEO3, ESEO4, ESEO5, ESEO6, ESEO7, ESEO8, ESEO9<br>(9 items)                                      | 3 DIMENSIONS                        | MULTIDIMENSION<br>INNOVATIVENESS: ESEO1, ESEO2, ESEO3<br>PROACTIVENESS: ESEO4, ESEO5, ESEO6<br>RISKINESS: ESEO7, ESEO8, ESEO9 |
| Government Assistnce Program (RAGAP)      | RAGAP1, RAGAP2, RAGAP3, RAGAP4, RAGAP5, RAGAP6, RAGAP7, RAGAP8, RAGAP9<br>(9 items)                             | RAGAP1, RAGAP8<br>(2 items)         | RAGAP2, RAGAP3, RAGAP4, RAGAP5, RAGAP6, RAGAP7, RAGAP9<br>(7 items)   |
| Online Social Networking Adoption (RAOSN) | RAOSN1, RAOSN2, RAOSN3, RAOSN4, RAOSN5, RAOSN6, RAOSN7, RAOSN8, RAOSN9, RAOSN10, RAOSN11, RAOSN12<br>(12 items) | RAOSN4, RAOSN12<br>(2 items)        | RAOSN1, RAOSN2, RAOSN3, RAOSN5, RAOSN6, RAOSN7, RAOSN8, RAOSN9, RAOSN10, RAOSN11<br>(10 items)                                |

### 3.8.2 Validity and reliability

Measurement error is a common problem for research involving instrument. Measurement error generally refers to a situation when the actual data obtained do not truly reflect the intended conceptualization of the construct (Hair, et al., 2010). Consequently, this subsection reports procedures that have been conducted to establish validity and reliability of the construct in effort to minimize the measurement error.

### 3.9.4 Reliability analysis

A reliability test was conducted to examine the internal inconsistency of the instruments employed in this study; nascent venture performance, entrepreneurial bricolage, entrepreneurial orientation, government assistance program and online social networking adoption. Table 3.22 shows a summary on a total number of items for each instrument and their reliability coefficient after factor analysis were conducted.

Table 3.22  
*Reliability coefficient after factor analysis*

| Variable                                     | Number of items | Cronbach's alpha |
|--|-----------------|------------------|
| Nascent venture performance                  | 6               | 0.814            |
| Entrepreneurial bricolage                    | 6               | 0.795            |
| Entrepreneurial orientation (innovativeness) | 3               | 0.755            |
| Entrepreneurial orientation (riskiness)      | 3               | 0.781            |
| Entrepreneurial orientation (proactiveness)  | 3               | 0.824            |
| Government assistance program                | 7               | 0.914            |
| Online social networking adoption            | 10              | 0.885            |

From above table, all reliability coefficient of the construct shows above the par of good measures. Hair et al. (2006, 2010) have provided guidelines for the values of coefficient alpha, also referred to as Cronbach's alpha which range from 0 to 1. Table 3.23 below shows the rule of thumb to interpret alpha values as suggested by George and Mallery (2002) and Hair et al. (2006). Basically, the value of coefficient alpha of 0.7 is considered as minimal, even though lower values may also be acceptable depending on the research objectives (Hair et al., 2006, 2010). However, as a precaution, Hair et al. (2006, 2010) added that if the value of coefficient alpha recorded more than 0.95, the items should be inspected to ensure that they are measuring the different aspects of the concept.

Table 3.23  
*Rules of Thumb about Cronbach's Alpha Coefficient Size*

| <b>Alpha Coefficient Range</b> | <b>Strength of Association</b> |
|--------------------------------|--------------------------------|
| < 0.5                          | Unacceptable                   |
| < 0.6                          | Poor                           |
| 0.6 to < 0.7                   | Moderate                       |
| 0.7 to < 0.8                   | Good                           |
| 0.8 to < 0.9                   | Very Good                      |
| 0.9                            | Excellent                      |

*Source:* George and Mallery (2002), Hair et al. (2006)

The entrepreneurial strategies of entrepreneurial bricolage, entrepreneurial orientation of innovativeness and riskiness illustrates good internal consistency of 0.795, 0.755 and 0.781 respectively. Meanwhile the construct of proactiveness depict very good internal consistency at 0.824 followed by nascent venture performance at 0.814 and online social networking adoption at 0.885. the construct of government assistance program

obtained highest score of internal consistency at 0.914. this score indicates the strength of association between items is excellent as it achieves more than 0.9 scores but not more than 0.95. as concerned by Hair et al. (2006, 2010), the scores above 0.95 will lead to multicollinearity problem.

### **3.9 Analysis of Data**

The data will be processed using Statistical Packages for Social Science version 20 (SPSS 20) as statistical tool to facilitate data analyses. Descriptive analysis was employed to generate profile of the 183 respondents', including demographic and their firms' background are explained briefly in sub-section 5.1.1 and 5.1.2, followed by the descriptive analysis of all the constructs in subsection 5.1.3. Before proceed with inferential analyses, the researcher initiates data screening on various issues: i) non-response bias, ii) missing data iii) outliers (mahalanobis distance) as discussed in previous subsection of 4.7.1, and tests for multivariate assumptions (normality, linearity, homoscedascity or heteroscedascity, and correlated error). Meanwhile, comprehensive discussion on technique of analysis of correlation analysis, multivariate analysis and moderator analysis were discussed in the last part of this chapter and the output of findings were discussed in the next chapter.

#### **3.9.1 Descriptive analysis**

Descriptive statistics are employed to analyzed respondents' profile and venture's information. Frequency distributions will be obtained for all the personal data or classification variables such as the respondents' gender, age, race and other information related to personal information of entrepreneur and firm. This analysis also was

employed to analyzed profile of resources acquisitions by respondents for their ventures. Apart from that, mean and standard deviations of the dimensions and variables being studied were also analysed. These included the means and standard deviations for independent variable of entrepreneurial bricolage, three dimensions of the EO (innovativeness, proactiveness, risk taking), government assistance program and online social networking as moderating variable, and finally, business performance as the dependent variable.

According to (Hair et al., 2006, 2010), mean is the arithmetic average, and is one of the most commonly used measures of central tendency. It can be used when the data is measured with either an interval or a ratio scale (also called metric) (Hair et al., 2006, 2010). Meanwhile, standard deviation is a unit of measurement that has been squared (Hair et al., 2006, 2010). It describes the spread or variability of the sample distribution values from the mean, and is perhaps the most valuable index of dispersion (Hair et al., 2006, 2010). For instance, if the estimated standard deviation is large (for a 7-point Likert scale, value of  $>3.0$  is considered as large), the responses in a sample distribution of numbers do not fall very close to the mean of the distribution or it means that there is a lot of variability in the respondents' opinions. However, if the estimated standard deviation is small (value of  $<1.0$ ), then the distribution values are close to the mean or it means that the respondents were very consistent in their opinions about the variable (Hair et al., 2006, 2010). Finally, the standard deviation of the sampling distribution of the mean is also referred to as the standard error of the mean (Hair et al., 2006, 2010).

### **3.9.2 Multivariate Assumptions**

Testing research models with multivariate regression analysis demands few of multivariate assumptions need to be met. When these assumptions are violated, taking suitable statistical remedies or changing to more appropriate analytical tools is essential to achieve better findings. The assumptions are tested before can proceed with multivariate analysis are normality test, linearity test, multicollinearity and homoscedasticity test.

#### **3.9.2.1 Normality**

The first multivariate assumption which is needed to be met before analyzing multivariate analysis is normality. All the variables should approximate to normal distribution. Non-normal distributions of data will generate invalid results in analysis (Arbuckle, 2007; Byrne, 2010; Hair, et al., 2010). Normality is assessed by either statistical or graphical methods. Two components of normality are skewness and kurtosis. When a distribution is normal, the value of skewness and kurtosis should be closed to zero. For graphical method, normality can be determined by examining the residual plots. If the assumption is met, the residuals are normally and independently distributed (Tabachnick & Fidell, 2007).

In assessing normality for this study, skewness and kurtosis values for all variables were examined. As Skewness and Kurtosis tests are descriptive statistics (Razali & Wah, 2011), they can be interpreted as follows; data distribution is perfectly normal if the values of Skewness and Kurtosis is zero. Positive skew is where the right tail is too long with many cases piling up to the left. Negative skew is just the opposite of the positive

skew (Tabachnick & Fidell, 2007). Meanwhile, positive Kurtosis refers to data distribution that is peaked. In contrast, negative Kurtosis refers to data distribution that is flat (Pallant, 2007). With these guidelines, the summary of Skewness and Kurtosis were analysed as in Table 3.24.

As the table abbelow, all variables have the standard error for skewness ranging from -.004 to -.239, and kurtosis ranging from -.506 to -.691. Descriptively, it appears that while the Skewness of six variables was negative, the skewness of online social networking was positive. Meanwhile, all seven variables had flat data distribution.

Table 3.24  
*Skewness and Kurtosis results*

| Variables  | N   | Skewness  |            | Kurtosis  |            |
|--|-----|-----------|------------|-----------|------------|
|  |     | Statistic | Std. Error | Statistic | Std. Error |
| Nascent venture performance (BP)                     | 183 | -.192     | .180       | -.691     | .357       |
| Entrepreneurial Bricolage (ESEB)                     | 183 | -.121     | .180       | -.535     | .357       |
| Erepreneurial orientation innovativeness (ESEO_INNO) | 183 | -.004     | .180       | -.685     | .357       |
| Entrepreneurial orientation proactiveness (ESEO_PRO) | 183 | -.239     | .180       | -.566     | .357       |
| Entrepreneurial orientation risk-taking (ESEO_RT)    | 183 | -.160     | .180       | -.681     | .357       |
| Government assistance program (RAGAP)                | 183 | -.088     | .180       | -.630     | .357       |
| Online social networking (RAOSN)                     | 183 | .038      | .180       | -.506     | .357       |

To identify how skewed the data distribution could be, a simple calculation to get the range value of standard error can be performed by multiplying the standard error of the variable by 2. The data can be considered less skewed if the statistic value of the data falls within the range (Price, 2000). For example, as shown in the table, the range of standard error for nascent venture performance is from -.360 to .360 (.180\*2) where the



statistic value (-.192) falls within the range ( $-.360 < -.192 < .360$ ), which suggest that the data distribution for financial performance was not badly skewed. With the same calculation, it was shown that other variables were also not badly skewed. Since the same result was also observed for kurtosis, it had been proven that the data distribution of all variables is approximately normal.

### **3.9.2.2 Linearity and Homocedasticity**

Second multivariate assumption indicates that the relationship between independent and dependent variable is linear. If there is substantial non-linear relationship, they will be ignored in the analysis, which in turn underestimated the actual strength of the relationship (Tabachnick & Fidell, 2007). Meanwhile, third multivariate assumption of homoscedasticity explained the variance of the dependent variable is approximately the same levels of the explanatory variables (Hair, et al., 1998). Berry and Feldman (1985) indicated when the width of the band of residuals is approximately the same at different levels of the dependent variable and scatter plots show a pattern of residuals normally distributed around the mean (Berry & Feldman, 1985).

For assessment of linearity and homocedasticity between variables, scatter plots were conducted on all variables. Scatterplot figures of the six variables should exhibit a fairly diagonal straight line of the standardised residual values from the bottom left to the top right of the graph (Pallant, 2007). As suggested in the figure 3.2 below, the scatter plots of the six analyses were consistently showing that the standardised residual values were plotting fairly around the diagonal straight line from bottom left to top right of the graphs with some of the values being plotted above and some plotted below the lines in

intermittent style. For these reasons, it was observed that the assumption for linearity and homocedasticity was met.

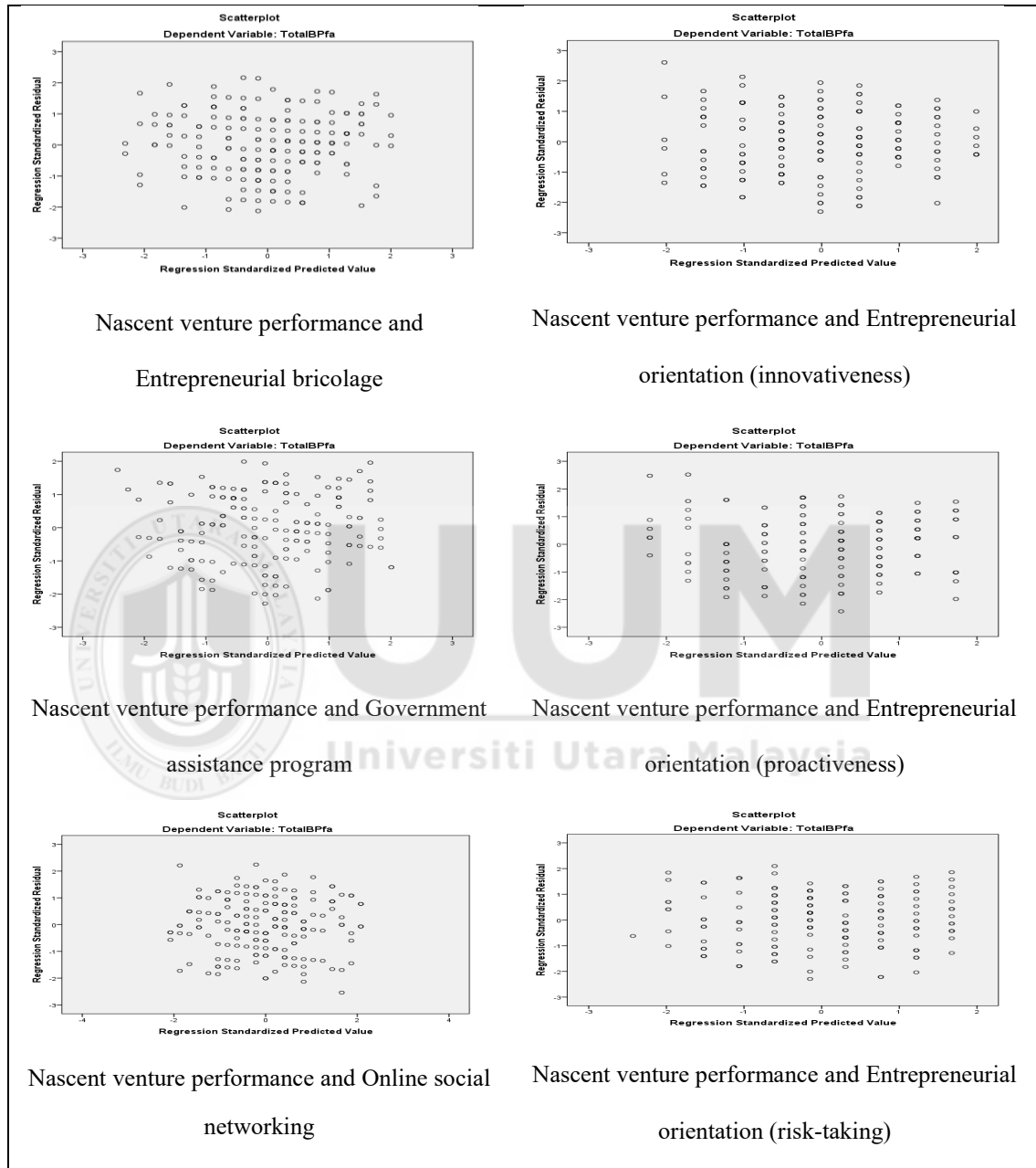


Figure 3.2. Scatterplot figures of the six variables.

### 3.9.3.3 Multicollinearity

The fourth multivariate assumptions which need to be met is multicollinearity. Multicollinearity is a serious problem which refers to the higher degree of inter-correlations among independent variables (Hair, Anderson, Tatham, & Black, 1995), which would cause the regression coefficient to be poorly estimated and less reliable (Paul, 2006; Hamburg, 1983; Pfaffenberger & Patterson, 1981). In case of occurrence of multicollinearity, calculation of impact of each variable becomes difficult which causes over estimation of independent variables.

One of the most often used tests of multicollinearity is the inspection of matrix bi-variate correlation (Berry & Fledman, 1985). If the value of correlation coefficient exceeds 0.90 and independent variables, it indicates the occurrence of multicollinearity (Hair et al., 2006, 2010). It was observed that the effects of multicollinearity still exist for this study, but minimal. For instance, the existence of multicollinearity can be evidenced in the correlation analysis where the coefficient correlations between IVs ranged from 0.002 to 0.491. However, as suggested earlier, IVs can be considered as highly correlated if the value is more than 0.90 (Tabachnick & Fidell, 2007; Hair et al., 2006, 2010). Since the maximum value was just 0.491 (compared to 0.9), it can be surmised that the effects of multicollinearity to be low.

Additionally, multicollinearity also can be identified by inspecting the Coefficients Table from the SPSS output where the values of Tolerance and Variance Inflation Factor (VIF) are provided. Tolerance value that is not less than 0.1 and the VIF value that is not more than 10 (Pallant, 2007) were accepted as a cut-off points to suggest low effects of multicollinearity (Hair, Anderson, Tatham, & Black, 1995). Table 3.25 shows

the results of multicollinearity diagnostics for the six analyses. Based on this table, it was observed that the minimum and maximum Tolerance values for all analyses ranged from 0.881 to 0.982, which is greater than 0.1, and the VIF values ranged from 1.019 to 1.135, which is less than 10. Thus, the fourth multivariate assumption is met as the cut off points for the Tolerance and VIF were not violated.

Table 3.25  
*Results of multicollinearity diagnostics*

| Variables                                    | Collinearity Statistics |       |
|--|-------------------------|-------|
|  | Tolerance               | VIF   |
| Entrepreneurial Bricolage                    | .982                    | 1.019 |
| Entrepreneurial Orientation (Innovativeness) | .940                    | 1.063 |
| Entrepreneurial Orientation (Proactiveness)  | .881                    | 1.135 |
| Entrepreneurial Orientation (Risk Taking)    | .887                    | 1.128 |
| Government Assistance Program                | .970                    | 1.031 |
| Online Social Networking                     | .964                    | 1.037 |
| Cut-off point                                | > 0.1                   | <10   |

### 3.9.3 Bivariate analysis: correlation analysis

The measure of association is a good way to evaluate relationships (Nardi, 2003). Since correlation analysis is used to explain the strength and describe the direction of linear relationship between two variables (Pallant, 2007), it suits Objectives 1 of the study, which was interested in knowing the relationship between two variables without considering the causal effect between them. As such, the correlation analysis was applied for testing the hypotheses on Objectives 1. Even though one limitation for using correlation analysis is that it does not indicate which variable is the cause and which is

the effect (Pearl, 2009; Hamburg, 1987), it was deemed that this limitation was not applicable for Objectives 1 that was not to determine the cause and effect between ventures strategy, resources acquisitions and NV performance.

Correlation analysis is a measure of strength and direction of linear relationship between two variables (Pallant, 2007). It can be obtained by computing the Pearson's product-moment correlation coefficient that is frequently used in behavioural sciences and denoted with  $r$ . By taking any values from -1 to +1 (Hinkle, Wiersma, & Jurs, 2003), it helps to indicate how well two variables are closely related to each other (MacCallum, Zhang, Preacher, & Rucker, 2002; Litwin, 1995). A perfect relationship exists if the  $r$  value is 1, while no relationship exists if the value is 0 (Pallant, 2007). The  $r$  value also indicates the direction of relationship (Argyrous, 2011) where positive relationship suggests an increase in one variable would also increase the other one, while a negative relationship suggests an increase in one variable would decrease the other one (Pallant, 2007).

However, the criteria to interpret the  $r$  value are arbitrary. As such, the interpretation of  $r$  value should depend on the specific application (Garcia, 2010; Hamburg, 1983). For this study, the strength of relationship was considered small if  $r$  value was between 0.1 and 0.3, medium if  $r$  value was between 0.3 and 0.5, and strong if  $r$  value was between 0.5 and 1.0 (Garcia, 2010; Cohen, 1988). Nevertheless, this categorisation should be treated as a guideline because it is not a precise mathematical cut-off (Zechmeister & Posavac, 2003). Meanwhile, a more meaningful measure of linear relationship between two variables can be obtained with coefficient of determination, denoted with  $r$  square that explains the proportion of variance in dependent variable (DV) by the variation in

independent variable (IV) (MacCallum, Zhang, Preacher, & Rucker, 2002; Pfaffenberger & Patterson, 1981).

Even though the significance level of  $p < 0.05$  is commonly applied in the social science, since the sample size of this study is above 100 but not achieved the required sample size, the acceptable significance level that was used throughout this study is  $p < 0.1$  or at the 90% confidence level. This significance level is chosen for this study because with “all things being equal, standard errors will be larger in smaller data sets, so it may make sense to choose 0.1 [as significance level] in a smaller data set” (Noymer, 2008, p.18). In other words, by using the significance level of  $p < 0.1$ , the possibility of not finding support to an alternative hypothesis that was blindsided by larger standard errors can be reduced (if using  $p < 0.05$ ). As such, the type II error that fails to reject the null hypothesis can be avoided (Tabachnick & Fidell, 2007).

Furthermore, since the recommended (suitable) sample size for this study is 201, whereas the actual sample size is 183, it was shown that the actual sample size is relatively small compared to any other previous studies (Gomezelj & Kusce, 2013; Chrisman, et al., 2012; Jones & Jayawarna, 2010; Senyard, et al., 2009; Senyard, et al., 2011; Lumpkin & Dess, 2001; Deniz, 2016; Rashid & Mahmood, 2016). Therefore, the significance level of 0.1 is suitable for this study. Nevertheless, although  $p < 0.1$  is accepted as the minimum significance level for this study (for the above mentioned reasons), higher significance levels, such as  $p < 0.05$  and  $p < 0.01$  were also be applied when necessary. Hence, by default, this significance level ( $p < 0.1$ ) was referred for interpreting the correlation and multiple regression analyses in this study.

### 3.9.4 Multivariate analysis: multiple regression analysis

Checking for assumptions is part of the early steps on regression analysis (Pallant, 2007) which were already discussed in previous subsections (see subsection 4.5.2). The next step was to interpret the outputs from model summary, coefficient table (Argyrous, 2011), and hierarchical of moderator analysis (Sharma, Durand & Gur-Arie, 1981; Baron & Kenny, 1986; Bergkvist, 2004; Sharma, Durand, & Gur-Arie, 1981), which are discussed in the following subsections.

The correlation coefficient ( $r$ ) and coefficient of determination ( $r$  square) are also used to indicate the relationship between more than one IV and DV (Argyrous, 2011). As such, the interpretation of  $r$  for linear regression of two variables (bivariate) is similar to  $R$  for multiple regressions (multivariate) (Hinkle, Wiersma, & Jurs, 2003). Accordingly, the interpretation of  $r$  square for bivariate analysis is similar to the  $R$  square for multivariate analysis (Frankfort-Nachmias & Leon Guerrero, 2009). obviously, in multiple regression analysis the  $R$  square value tends to overestimate variance in DV. As such, the Adjusted  $R$  square value is referred to (Argyrous, 2011).

The interpretation of Adjusted  $R$  square is quite similar to  $R$  square, but the difference is where the value is adjusted according to the number of IVs in the equation (Argyrous, 2011), which is very useful in comparing the equations between different numbers of IVs (Hair, Anderson, Tatham, & Black, 1995). Besides that,  $R$  square change,  $F$  value, and  $F$  change of the model are also highlighted in the Model Summary. If the  $R$  square change is increased from the former model, it indicates the contribution of the latter model being greater in explaining variance in DV. Meanwhile, the  $F$ -test is used to test the significance of regression model for more than two IVs (Blackwell, 2008). If  $F(v1,$

$v_2) > F_\alpha$ , the decision would be to reject null hypothesis that all  $B_i = 0$ , but if  $F(v_1, v_2) \leq F_\alpha$ , the decision would be to retain the null hypothesis, where  $v_1 = k - 1$  is the regression sum of square,  $v_2 = n - k$  is for the error,  $k$  is the number of constants in the regression equation, and  $F_\alpha$  is the critical F value (Blackwell, 2008; Hamburg, 1987).

The Coefficient Table provides information on Beta values and t-statistics. By transforming the b weights of each IVs into Beta ( $\beta$ ) coefficients, different IVs that may be measured with different units can be compared (Nardi, 2003). As a result, the comparison is done with the standardised coefficient, which is basically the Pearson's  $r$  that "allows us to distinguish the relative importance of each of the independent variable [IV] in determining the value of the dependent variable [DV]" (Argyrous, 2011, p. 262). Thus, this analysis suits in answering objectives 2 and 3 where it used to determine the cause and effect between ventures strategies and nascent venture performance.

### **3.9.5 Multivariate analysis: Hierarchical regression of moderator analysis**

A moderator variable is regarded as a variable that can systematically modify either the form and/or strength of the relationship between predictor and criterion variables (Sharma, Durand & Gur-Arie, 1981; Baron & Kenny, 1986). Moderation implied an interaction effect because when we introduced a moderating variable, it changes the direction and/or strength of the relationship between predictor and criterion. Interaction effects are not only important for intervention studies. Also, most of the researchers interested on the significance of interaction whether relations between predictor and outcome or criterion are stronger for some people and others (Frazier, Tix & Barron, 2004).



The existence of moderation effects of resources acquisition in the relationship between entrepreneurial strategy and nascent venture performance is shown by Model 3 (for interaction variable) in the hierarchical multiple regression analysis. However, the analysis does not specify the types of moderation. Knowing the types of moderation is important because resources acquisition can either affect the strength of relationship or modify the form of relationship between entrepreneurial strategy and nascent venture performance. For these reasons, the typology of specification variable that is commonly referred by various studies interested in investigating moderation effects (Bontis & Serenko, 2007) is used to identify the types of moderations, which is displayed in Table 3.26 below.

Table 3.26  
*Typology of Specification Variable*

|                                  | Related to Criterion<br>and/or Predictor | Not Related to Criterion<br>and Predictor |
|----------------------------------|--|---|
| No Interaction with<br>Predictor | (1) Not Moderator                        | (2) Moderator<br>(Homologiser)            |
| Interaction with Predictor       | (3) Moderator<br>(Quasi Moderator)       | (4) Moderator<br>(Pure Moderator)         |

According to the quadrants in this table, the specification variable can be a (1) homologiser if it does not interact with the predictor and not related to the criterion (Quadrant 2), (2) quasi moderator if it does interact with the predictor and related to the criterion (Quadrant 3), or (3) pure moderator if it does interact with the predictor but not related to the criterion (Quadrant 4). However, the specification variable cannot be

a moderator if it does not interact with the predictor but related to the criterion (Quadrant 1). In addition, while the homologue affects the strength of relationship, pure and quasi moderators modify the form of relationship between predictor and criterion (Bergkvist, 2004; Sharma, Durand, & Gur-Arie, 1981).

### **3.10 Chapter Summary**

This chapter discusses about the research methodology employed in this study. This study employed a survey method to collect the data, which then used a quantitative approach to observe and measured the collected numeric information. Unit analysis of this study was a firm that was represented by the owner-manager. All survey questionnaires were prepared in English and then translated into Malay Language version in order to encourage the respondents' participation. Then, the link of questionnaire were sent through company's email address and to reach the expected outcome, follow-up procedures had been conducted as well.

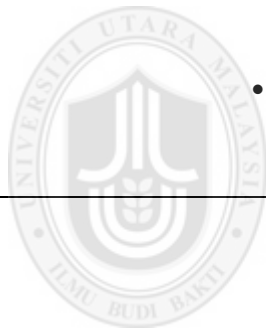
The first research objective until six, the researcher performed bivariate correlation analysis, multiple regression analysis and hierarchical regression analysis technique to obtain the upshot. Before inferential statistics were done, researcher examined and cleaned the data. Also, fulfilling the multivariate assumptions before inferential analysis takes place. Exploratory factor analysis and reliability analysis were conducted to determine the actual number of factors underlying each construct. All analysis was run using statistical package for social science version 20 (SPSS 20.0). Table 3.27 summarizes the data analysis techniques adopted by the researcher according to the research objectives to answer the formulated hypotheses in chapter three.

Table 3.27

*Summary of research objectives, hypotheses assumptions and the data analysis used in this study.*

| Research objectives   | Hypothesis Testing   | Data analysis  |
|---|--|--|
| To examine the relationship between entrepreneurial bricolage with performance of nascent venture in Malaysia.  | <b>H<sub>1</sub>: The venture strategy of entrepreneurial bricolage has a significant effect on nascent venture performance.</b>   | <ul style="list-style-type: none"> <li>➤ Bivariate correlation analysis               <ul style="list-style-type: none"> <li>• Pearson correlation</li> </ul> </li> <li>➤ Multiple regression analysis</li> <li>➤ SPSS 20.0</li> </ul> |
| To examine the relationship between entrepreneurial orientation with performance of nascent venture in Malaysia.  | <b>H<sub>2</sub>: The venture strategy of entrepreneurial orientation positively influence the nascent venture performance.</b> <ul style="list-style-type: none"> <li>• H<sub>2a</sub>: The venture strategy of innovativeness positively influence the nascent venture performance.</li> <li>• H<sub>2b</sub>: The venture strategy of proactiveness positively influence the nascent venture performance.</li> <li>• H<sub>2c</sub>: The venture strategy of risk taking positively influence the nascent venture performance.</li> </ul> |  |
| To evaluate the moderating effect of government assistance programs on the relationship between entrepreneurial bricolage and performance of nascent venture in Malaysia.   | <b>H<sub>3</sub>: Government assistance program moderates the relationship between entrepreneurial bricolage and nascent venture performance.</b>  | <ul style="list-style-type: none"> <li>➤ Hierarchical regression analysis</li> <li>➤ SPSS 20.0</li> </ul>  |
| To evaluate the moderating effect of government assistance programs on the relationship between entrepreneurial orientation and performance of nascent venture in Malaysia. | <b>H<sub>4</sub>: Government assistance program moderates the relationship between entrepreneurial orientation and nascent venture performance.</b> <ul style="list-style-type: none"> <li>• H<sub>4a</sub>: Government assistance program moderates the relationship between innovativeness and nascent venture performance.</li> <li>• H<sub>4b</sub>: Government assistance program moderates the relationship between proactiveness and nascent venture performance.</li> </ul>  |  |

|  |   |   |
|--|---|---|
| <p>To evaluate the moderating effect of online social networking on the relationship between entrepreneurial bricolage and performance of nascent venture in Malaysia.</p>   | <ul style="list-style-type: none"> <li>• H<sub>4c</sub>: Government assistance program moderates the relationship between risk taking and nascent venture performance.</li> </ul> <p><b>H<sub>5</sub>: Online social networking moderates the relationship between entrepreneurial bricolage and nascent venture performance.</b></p>   | <ul style="list-style-type: none"> <li>➤ Multiple regression analysis</li> <li>➤ Hierarchical regression analysis</li> <li>➤ SPSS 20.0</li> </ul> |
| <p>To evaluate the moderating effect of online social networking on the relationship between entrepreneurial orientation and performance of nascent venture in Malaysia.</p> | <p><b>H<sub>6</sub>: Online social networking moderates the relationship between entrepreneurial orientation and nascent venture performance.</b></p> <ul style="list-style-type: none"> <li>• H<sub>6a</sub>: Online social networking moderates the relationship between innovativeness and nascent venture performance.</li> <li>• H<sub>6b</sub>: Online social networking moderates the relationship between proactiveness and nascent venture performance.</li> <li>• H<sub>6c</sub>: Online social networking moderates the relationship between risk taking and nascent venture performance.</li> </ul> |   |



## **CHAPTER 4**

### **RESEARCH FINDINGS**

#### **4.0 Introduction**

This chapter discusses the result of data analysis. The data finding contained relevant analyses of results which were descriptive and inferential analyses – hypothesis testing on correlation and effects between entrepreneurial strategies (entrepreneurial bricolage and entrepreneurial orientation) and nascent venture performance as well as moderating variables which were government assistance program and online social networking as explained in the previous chapters. Data was analyzed using IBM Statistical Package for Social Science version 20. Results were aimed at answering the research objectives:

- 1) To examine the relationship between entrepreneurial bricolage with performance of nascent venture in Malaysia.
- 2) To examine the relationship between entrepreneurial orientation with performance of nascent venture in Malaysia.
- 3) To evaluate the moderating effect of government assistance programs on the relationship between entrepreneurial bricolage and performance of nascent venture in Malaysia.
- 4) To evaluate the moderating effect of government assistance programs on the relationship between entrepreneurial orientation and performance of nascent venture in Malaysia.
- 5) To evaluate the moderating effect of online social networking adoption on the relationship between entrepreneurial bricolage and performance of nascent venture in Malaysia.

- 6) To evaluate the moderating effect of online social networking adoption on the relationship between entrepreneurial orientation and performance of nascent venture in Malaysia.

## 4.1 Analysis of Demographic Profile

This section describes distribution of samples based on demographic information of the respondent's profile, profiles of responding firms, and characteristics of resources acquisition (government assistance programs and online social network adoption) by entrepreneurs of nascent venture.

### 4.1.1 Respondents' demographic profile

In this section, Table 4.1 summarized the respondent demographic profile which are entrepreneurs of nascent venture profile according to their gender, age, age starting their business, education, work experience, start-up experience and position in business as illustrated in Table 4.1.

Table 4.1

*Respondent's demographic profile*

| <b>Entrepreneur's Gender</b>                 | <b>Frequency</b> | <b>Percent</b> |
|--|------------------|----------------|
| Male   | 89               | 48.6           |
| Female                                       | 94               | 51.4           |
| <b>Entrepreneur's Age</b>                    | <b>Frequency</b> | <b>Percent</b> |
| 18-35 years old                              | 111              | 60.7           |
| 36-45 years old                              | 37               | 20.2           |
| 46-55 years old                              | 29               | 15.8           |
| 56 years old and above                       | 6                | 3.3            |
| <b>Entrepreneur's Academic Qualification</b> | <b>Frequency</b> | <b>Percent</b> |
| SPM/STPM                                     | 41               | 22.4           |

|   |                  |                |
|---|------------------|----------------|
| Diploma   | 45               | 24.6           |
| Bachelor's Degree                                   | 89               | 48.6           |
| Master Degree                                       | 6                | 3.3            |
| Others  | 2                | 1.1            |
| SRP   | 1                | 0.55           |
| STNDRD 6  | 1                | 0.55           |
| <b>Entrepreneur's Age Started Business</b>          | <b>Frequency</b> | <b>Percent</b> |
| 18-35 years old                                     | 134              | 73.2           |
| 36-45 years old                                     | 36               | 19.7           |
| 46-55 years old                                     | 11               | 6.0            |
| 56 years old and above                              | 2                | 1.1            |
| <b>Entrepreneur's Work Experience</b>               | <b>Frequency</b> | <b>Percent</b> |
| Yes   | 148              | 80.9           |
| No  | 35               | 19.1           |
| <b>Entrepreneur's Period of Work Experience</b>     | <b>Frequency</b> | <b>Percent</b> |
| No experience                                       | 35               | 19.1           |
| Below than 5 years                                  | 86               | 47.0           |
| 11-15 years   | 21               | 11.5           |
| 6-10 years  | 32               | 17.5           |
| 16 years and above                                  | 9                | 5.9            |
| <b>Entrepreneur's Start-Up Experience</b>           | <b>Frequency</b> | <b>Percent</b> |
| Yes   | 81               | 44.3           |
| No  | 102              | 55.7           |
| <b>Entrepreneur's Period of Start-Up Experience</b> | <b>Frequency</b> | <b>Percent</b> |
| No Experience                                       | 102              | 55.7           |
| Below than 2 years                                  | 54               | 29.6           |
| 2-5 years   | 22               | 12.0           |
| 6-8 years   | 2                | 1.1            |
| 8 years and above                                   | 3                | 1.6            |
| <b>Entrepreneur's Position in Business</b>          | <b>Frequency</b> | <b>Percent</b> |
| Business Owner                                      | 175              | 95.6           |
| Other (CMO)   | 8                | 4.4            |

Respondent's demographic profile described the background of nascent ventures' entrepreneurs. The difference in gender did not show any big variance between male and female where female respondents at 51.4 percent compared to male respondents at 48.6 percent. In analyzing entrepreneurs of nascent venture, age of entrepreneurs became an important indicator to perpetuate new venture creation by young entrepreneurs. The finding of frequency analysis shows that respondents aged between 18-35 years old dominate the ownership of nascent ventures at 60.7 percent.

In addition, the findings of the entrepreneur's age in starting the venture also dominated by the respondents at aged 18 – 35 years old at 73.2 percent followed by the respondents who are age at 36 – 45 years old at 19.7 percent. The academic qualification of respondents showed most of the entrepreneurs in nascent venture are bachelor degree holders at 48.6 percent followed with diploma holder and SPM/ STPM leavers at 24.6 percent and 22.4 percent respectively. Only 6 respondents were Master Degree holders at 3.3 percent while 1.1 percent of "others" in academic qualification corresponds to the respondents who have only SRP (Sijil Rendah Pelajaran) and Standard Six with the 0.55 percent respectively.

Respondents also were asked at their work and start-up experience. There was 80.9 percent of respondent have work experiences. From 148 respondents who have work experiences, 47.0 percent of respondents have less than 5 years work experience, 17.5 percent have 6 to 10 years work experience, 11.5 percent have 11- 15 years of work experience and 5.9 percent of respondents have work experience more than 16 years. Besides, only 81 respondents have start-up experience with majority of them have experience between less than 2 years (29.6 percent) and 2 – 5 years (12.0 percent). From



the findings also, 95.6 percent of respondents were business owners, while 4.4 percent were management staff (CMO).

#### 4.1.2 Nascent ventures' demographic profile

While in the section 4.1.1 focused on the entrepreneurs of nascent venture, this section emphasized on the descriptive findings of nascent venture. Table 4.2 summarized profiles of responding firms according to the business number of employee, business category, business handling management (time) by entrepreneur, business location, receiving business assistance programs, and adopting online social network in business.

Table 4.2  
*Nascent Venture's Demographic*

| <b>Business Number of Employee</b> | <b>Frequency</b> | <b>Percent</b> |
|------------------------------------|------------------|----------------|
| Less than 5 persons                | 85               | 46.4           |
| 6 - 20 persons                     | 90               | 49.2           |
| 21 - 100 persons                   | 8                | 4.4            |

| <b>Business Category</b> | <b>Frequency</b> | <b>Percent</b> |
|--------------------------|------------------|----------------|
| Manufacturing            | 22               | 12.0           |
| Services                 | 97               | 53.0           |
| Agriculture              | 18               | 9.9            |
| Construction             | 7                | 3.8            |
| Retailing                | 4                | 2.2            |
| Food and Beverages       | 35               | 19.1           |

| <b>Business Handling Management (Time) by Entrepreneur</b> | <b>Frequency</b> | <b>Percent</b> |
|--|------------------|----------------|
| Less than 6 Hours  | 37               | 20.2           |
| 6 - 12 Hours   | 74               | 40.4           |
| 13 - 18 Hours  | 72               | 39.3           |

| <b>Business Location</b> | <b>Frequency</b> | <b>Percent</b> |
|--------------------------|------------------|----------------|
| Shopping Centre          | 11               | 6.0            |
| Downtown Area            | 28               | 15.3           |
| Office Buildings         | 72               | 39.3           |
| Home-Based               | 60               | 32.8           |
| Free Standing Locations  | 12               | 6.6            |

| <b>Receiving Business Assistance Programs</b> | <b>Frequency</b> | <b>Percent</b> |
|---|------------------|----------------|
| Yes   | 180              | 99.4           |
| No  | 1                | .6             |

| <b>Adopting Online Social Network in Business</b> | <b>Frequency</b> | <b>Percent</b> |
|---|------------------|----------------|
| Yes   | 181              | 100.0          |
| No  | 0                | 0              |

The nascent venture has been defined as the ability of an emerging business to exist profitably within one to five years of its establishment (Dzathor, Mosley & White, 2013; Driessen & Zwart, 1999). Thus, to achieve the criteria of nascent venture, only businesses which are registered in January 2010 were selected in order for the ventures to be categorized as a nascent venture (not exceed than or 5 years) when the data collection process is carried out. The age of all the responding firms was 5 years old. Business number of employees shared almost the same percentage between employees less than 5 persons and 6 – 20 persons' 46.4 percent and 49.2 percent respectively. These finding proved most of nascent ventures were micro, small and medium business. Business category finding shows services was the highest business ventured by respondents at 53.0 percent followed by food and beverages business at 19.1 percent, manufacturing at 12.0 percent, agriculture, construction and retailing at 9.9 percent, 3.8 percent and 2.2 percent respectively.

Entrepreneurs in nascent venture had spent more time in managing their business. The result of business handling management (time) by entrepreneur indicates respondents spent most 6 – 12 hours and 13 – 18 hours at 40.4 percent and 39.3 percent respectively. In addition, majority of respondents operates their business venture at office buildings and home-based. 39.3 percent respondents owned office buildings while 32.8 percent do their businesses at home. Only 6.0 percent located their business at shopping centre which implies most of the entrepreneurs in nascent ventures were facing resources constraint. Thus, having business in shopping area was difficult for them where the rental cost can be their main challenges in sustaining their nascent business. Respondents also were asked if they received business assistance program and did they adopted online social networking in their business. All the respondents received government assistance programs and adopted social networkings in their business.

#### 4.1.3 Profile of Resources Acquisition Characteristics

This section discussed the characteristics of resources acquisition (receiving business assistance programs and online social networking adoption) by entrepreneurs of nascent venture. Table 4.3 summarized characteristics of receiving business assistance programs while Table 4.4 summarized characteristics of online social networking adoption.

Table 4.3  
*Receiving Business Assistance Programs*

| Types of Business Assistance Programs | Frequency        | Percent        |
|---------------------------------------|------------------|----------------|
| Financial                             | 46               | 25.1           |
| Non-Financial                         | 40               | 21.9           |
| Receiving Both Assistance             | 97               | 53.0           |
| Did Not Receiving Any Assistance      | 0                | 0              |
| <b>Financial Assistance</b>           | <b>Frequency</b> | <b>Percent</b> |

|                                 |                  |                |
|---------------------------------|------------------|----------------|
| Soft Loans                      | 118              | 64.5           |
| Grants                          | 1                | .6             |
| Sponsorship                     | 1                | .6             |
| Asset assistance                | 37               | 20.2           |
| <b>Non-Financial Assistance</b> | <b>Frequency</b> | <b>Percent</b> |
| Entrepreneurship program        | 57               | 31.5           |
| Marketing program               | 111              | 61.3           |
| Management Program              | 24               | 13.3           |
| Technical assistance program    | 7                | 3.9            |

Discussed in subsection 2.7.2, types of government assistance program were identified as financial and non-financial assistance. Half of respondents received both assistance, financial and non- financial assistance at 53.0 percent while 25.1 percent received only financial assistance and 21.9 percent received only non-financial assistance for his/her business. Soft loans, grants, sponsorship and asset assistance are divisions for financial assistance. On the other hand, non – financial assistance consists from entrepreneurship program, marketing program, management program and technical assistance program. Capital constraints especially in money giving huge challenges for nascent ventures to grow. Entrepreneurs overcome their constraints by obtaining soft loans from government. There were 64.5 percent of respondents received soft loans followed 20.2 percent of respondents received asset assistance. Majority of respondents received marketing programs for their non-financial assistance.

Table 4.4  
Adopting Online Social Network for Business

| <b>Types of Business Social Network</b> | <b>Frequency</b> | <b>Percent</b> |
|---|------------------|----------------|
| Facebook                                | 174              | 95.1           |
| Twitter                                 | 63               | 34.4           |
| Instagram                               | 56               | 30.6           |
| Blogs                                   | 35               | 19.1           |
| Whatsapp                                | 139              | 76.0           |
| <b>Purpose of Usage</b>                 | <b>Frequency</b> | <b>Percent</b> |
| Selling product                         | 169              | 92.3           |
| Promotion and advertising               | 160              | 87.4           |

|                                   |                  |                |
|-----------------------------------|------------------|----------------|
| Increase networking               | 110              | 60.1           |
| Received complaints and feedbacks | 27               | 14.8           |
| Do a market survey                | 39               | 21.3           |
| <b>Managing Time of Usage</b>     | <b>Frequency</b> | <b>Percent</b> |
| Less than once a week             | 18               | 9.8            |
| 2 or 3 times a week               | 44               | 24.0           |
| About once a day                  | 54               | 29.5           |
| Several times each day            | 67               | 36.7           |
| <b>Frequency of Usage</b>         | <b>Frequency</b> | <b>Percent</b> |
| Extremely frequent                | 64               | 35.0           |
| Quite frequent                    | 57               | 31.1           |
| Neither frequent or infrequent    | 44               | 24.0           |
| Quite infrequent                  | 18               | 9.9            |

Previous Table 4.2 showed all of respondents adopt online social networking for their business. The types of social network of respondents mostly used for their business are facebook, twitter, Instagram, blogs and Whatsapp phone application. Facebook was the commonly used by respondents at 95.1 percent followed by Whatsapp phone application at 76.0 percent. Selling products, promotion and advertising and increased networking was the highest rate why respondents used online social networking for their business venture at 92.3 percent, 87.4 percent and 60.1 percent respectively. The finding of managing time of usage also indicates 36.7 percent of respondents manage to use their online social networking several times each day followed by 29.5 percent used it once a day. Meanwhile, the frequency of usage also shows majority of respondents frequently used their online social networks where extremely frequent exhibited at 35.0 percent and quite frequent at 31.1 percent.

## 4.2 Analysis of Research Variables

In the early discussions of research framework, there were five variables in this study which comprised one dependent variable, two independent variables and two

moderators. The dependent variable is nascent venture performance (BP), Independent variable was categorized as entrepreneurial strategy. Meanwhile, moderator was categorized as resources acquisition. Independent variables are entrepreneurial bricolage (ESEB) and entrepreneurial orientation (ESEO). Entrepreneurial orientation formed as a multidimensional variable after factor analysis was run. Entrepreneurial orientation consists of innovativeness, proactiveness and risk taking. Moderator variables are government assistance program (RAGAP) and online social networking adoption (RAOSN). All variables except entrepreneurial orientation were measured as a unidimension variable.

Table 4.5  
Descriptives Statistics of variables.

| <b>Variables</b>                     |  |  | <b>No of Items</b> | <b>Min</b> | <b>Max</b> | <b>Mean</b> | <b>Std Dev</b> |
|--------------------------------------|--|--|--------------------|------------|------------|-------------|----------------|
| Nascent Venture Business Performance |  |  | 6                  | 2.33       | 5.00       | 3.6903      | 0.597          |
| Entrepreneurial Bricolage            |  |  | 6                  | 2.83       | 5.00       | 3.9964      | 0.476          |
| EO – Innovativeness                  |  |  | 3                  | 2.33       | 5.00       | 3.6776      | 0.664          |
| EO – Proactiveness                   |  |  | 3                  | 2.33       | 5.00       | 3.8306      | 0.676          |
| EO – Risk Taking                     |  |  | 3                  | 2.00       | 5.00       | 3.7760      | 0.731          |
| Government Assistance Program        |  |  | 7                  | 1.29       | 5.00       | 3.3208      | 0.836          |
| Online Social Networking Adoption    |  |  | 10                 | 3.00       | 5.00       | 4.0005      | 0.481          |

According to the Table 4.5, all studied variables were moderately perceived by respondents ranged  $M = 3.32$ ,  $SD = 0.84$  to  $M = 4.00$ ,  $SD = 0.48$ . Generally, respondents gave slightly high response to entrepreneurial bricolage (ESEB) and online social networking adoption (RAOSN) variables. This finding implies resources challenges has lead to the creative business strategies. In addition, as technology evolved, the online

social networking also became important tools for nascent ventures to emerge especially for advertising and networking purposes. The least responses perceived by respondents is the variable of government assistance program. This indicates respondents is not keen in receiving assistance programs provided by government which due to few factors.

#### **4.3 Inferential Statistics Analysis – Hypotheses testing**

Cavana, et al. (2001) defined hypothesis testing as the rational framework for applying statistical tests where statistic is used to confirm whether sample data of the research is significant or not. The purpose of hypothesis testing is to confirm the postulated relationship between various constructs through appropriate statistical technique in order to obtain satisfactory explanation for research questions (Cavana et al., 2001). Correlation analysis, multiple regression analysis and hierarchical regression analyses were utilized to answer the research questions as outlined in chapter one.

In answering research questions one, the bivariate analysis of pearson correlation was employed. Meanwhile for research questions two, three, four and five, multiple regression was utilized to generate the results of significance influence between variables. In order to run regression analysis, the data must clean from any missing case, outliers and meet the multivariate assumptions. All the requirement of data cleaning (see subsection 3.8.1) and tests for multivariate assumptions have been discussed in chapter three under subsection 3.9.2. Figure 4.1 provides the stage of inferential statistics analysis which were utilized the multivariate statistical technique to test the hypotheses testing.

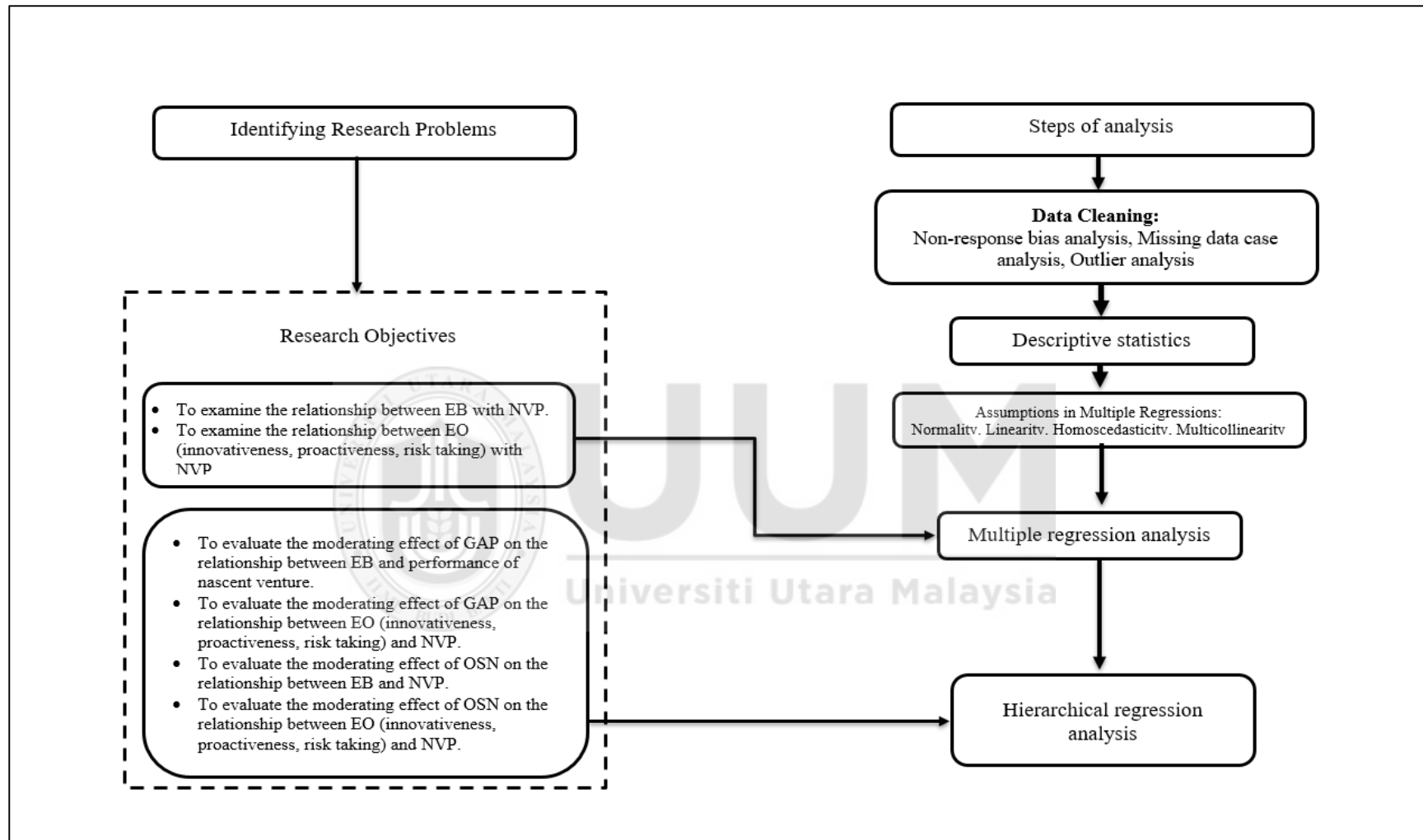


Figure 4.1. The stage of inferential statistics analysis



#### 4.4 Correlation Analysis

A Pearson correlation test was conducted to see the association between the variables. This study attempts to identify any of the relationships between IV's (entrepreneurial bricolage, innovativeness, proactiveness and risk taking), Moderators (government assistance programs and online social networking adoption) and the DV (nascent venture's performance).

The strength of the relationship between the variables can be determined by indicating the value of  $r$ . Pallant (2005) suggests the following: when the value is 0, it indicates there is no relationship, while a correlation of  $\pm 1.0$  indicates that there is a perfect positive or negative relationship. In order to interpret the values between 0 (no relationship) and 1 (perfect relationship), Cohen's (1988) suggestion was used. When  $r = \pm 0.1$  to  $\pm 0.29$ , the relationship is said to be weak, when  $r = \pm 0.30$  to  $\pm 0.49$ , the strength is moderate while when  $r$  is  $\pm 0.50$  and above, the strength is strong.

Meanwhile, Hair et al. (2006) have proposed the guidelines as shown in Table 5.6. Based on the Table, correlation coefficients between  $\pm 0.91$  and  $\pm 1.00$  are considered "very strong", correlation coefficients between  $\pm 0.71$  and  $\pm 0.90$  are considered "high", and correlation coefficients between  $\pm 0.41$  and  $\pm 0.70$  are considered "moderate". Meanwhile, correlation coefficients between  $\pm 0.21$  and  $\pm 0.40$  are considered "small but definite relationship", and finally, correlation coefficients between  $\pm 0.01$  and  $\pm 0.20$  are considered "sight, almost negligible". On the other hand, Berry and Feldman (1985) argued that the correlation coefficients that exceeded 0.8 (very strong correlation) will likely to result in multicollinearity.

Table 4.6

*Rules of Thumb about Correlation Coefficient Size\**

| Range                    | Degree of Common Variance       |
|--------------------------|---------------------------------|
| $\pm 0.91$ to $\pm 1.00$ | Very Strong                     |
| $\pm 0.71$ to $\pm 0.90$ | High                            |
| $\pm 0.41$ to $\pm 0.70$ | Moderate                        |
| $\pm 0.21$ to $\pm 0.40$ | Small but definite relationship |
| $\pm 0.01$ to $\pm 0.20$ | Slight, almost negligible       |

*Note:* \*Assumes correlation coefficient is statistically significant. Adopted from Hair et al. (2003)

The results of the relationship between the independent variables and the dependent variable are discussed in subsection below.

#### 4.4.1 The correlation between entrepreneurial strategies, resources acquisition and nascent venture performance

The correlation pearson analysis were employed to to see the association between the variables where to identify factors correlated with nascent venture performance. The overall findings of variables showed in Table 4.7 below.

Table 4.7

*Pearson Result on the Relationship between Variables (1 Tailed Test).*

|         | NVP    | EB    | EO_INNO | EO_PRO | EO_RT | GAP   | OSN |
|---------|--------|-------|---------|--------|-------|-------|-----|
| NVP     | 1      |       |         |        |       |       |     |
| EB      | .133*  | 1     |         |        |       |       |     |
| EO_INNO | .188** | -.002 | 1       |        |       |       |     |
| EO_PRO  | .491** | .050  | .193**  | 1      |       |       |     |
| EO_RT   | .266** | .031  | .151*   | .290** | 1     |       |     |
| GAP     | .151*  | -.018 | .093    | .034   | .196* | 1     |     |
| OSN     | .149*  | -.116 | -.080   | .069   | -.054 | -.067 | 1   |

*Note:* Nascent Venture Performance (NVP), Entrepreneurial Bricolage (EB), Entrepreneurial Orientation-Innovativeness (EO\_INNO), Entrepreneurial Orientation-Proactiveness (EO\_PRO), Entrepreneurial Orientation-RiskTaking (EO\_RT), Receiving Government Assistance Program (GAP), Online Social Networking Adoption (OSN), Correlation significance \*:  $p > 0.05$ , \*\*:  $p > 0.01$

From the result of Table 4.7, all the independent variables and moderator variables were positively significant with the dependent variable, nascent venture performance (NVP). Entrepreneurial orientation factor which derived from innovativeness, proactiveness and risk-taking variables were correlated at significance level  $p > 0.01$ . Meanwhile for the variable entrepreneurial bricolage (EB), receiving government assistance program (GAP) and online social networking adoption (OSN) were correlated with NVP at significance level  $p > 0.05$ . This finding implies that all variables were significant.

#### 4.4.2 The correlation between entrepreneurial strategies (Entrepreneurial Bricolage, Entrepreneurial Orientation-Innovativeness, Entrepreneurial Orientation-Proactiveness, Entrepreneurial Orientation-Riskiness) and nascent venture performance

Table 4.8 below depicts the pearson correlation result for relationship between entrepreneurial strategies and nascent venture performance. Finding postulates that all the independent variable of entrepreneurial strategies, entrepreneurial bricolage (EB), entrepreneurial orientation of innovativeness (EO\_INNO), proactiveness (EO\_PRO) and riskiness (EO\_RT) were positively related to nascent venture performance. Only entrepreneurial bricolage found to be significant at  $p > 0.05$ . Meanwhile, for variable innovativeness, proactiveness and riskiness, the significance level found at  $p > 0.01$ .

Table 4.8

*Pearson Result on the Relationship between entrepreneurial strategies (bricolage, innovativeness, proactiveness, riskiness) (1 Tailed Test).*

|         | NVP    | EB    | EO_INNO | EO_PRO | EO_RT |
|---------|--------|-------|---------|--------|-------|
| NVP     | 1      |       |         |        |       |
| EB      | .133*  | 1     |         |        |       |
| EO_INNO | .188** | -.002 | 1       |        |       |
| EO_PRO  | .491** | .050  | .193**  | 1      |       |
| EO_RT   | .266** | .031  | .151*   | .290** | 1     |

Although all the 'variables were positively significant with the dependent variable (NVP), the Pearson correlation results depicts the strength of the relationship were weak. Only proactiveness (EO\_PRO) found to have a moderate strength at  $r = 0.491$ ,  $p > 0.01^{**}$ . Innovativeness and entrepreneurial bricolage were significant at  $p > 0.01$ , where  $r = 0.188$  and  $r = 0.133$  respectively. According rule of thumb highlight by Hair, et al., (2003), correlation coefficient falls between  $\pm 0.01$  to  $\pm 0.20$  signifies the degree of common variance is small, almost negligible. Meanwhile, for riskiness variable, as the result of  $r = 0.266$ , it denotes the common variance is small but definite relationship.

#### 4.4.3 The correlation between resources acquisition (Government Assistance Program , Online Social Networking) and nascent venture performance

Table 4.9 below depicts the pearson correlation result for relationship between resources acquisition and nascent venture performance. Finding postulates that all the moderating variable of resources acquisition, government assistance program (GAP) and online social networking (OSN) were positively related to nascent venture performance. Both variables found to be significant at  $p > 0.05$ .

Table 4.9

*Pearson Result on the Relationship between resources acquisition (government assistance program and online social networking) (1 Tailed Test).*

|     | NVP   | GAP   | OSN |
|-----|-------|-------|-----|
| NVP | 1     |       |     |
| GAP | .151* | 1     |     |
| OSN | .149* | -.067 | 1   |

government assistance program and online social networking found to have weak relationship with nascent venture performance at  $r = 0.133$ ,  $r = 0.151$ ,  $r = 0.149$  respectively at  $p > 0.05$ . This finding implies that these variables also have the common variance of the relationship which is slightly, almost negligible. Above findings reflects

that other variables except proactiveness have weak relationship with nascent venture performance. Table 4.10 below summarized result of correlation analysis of variables to demonstration the relations between variables before proceeding to multiple regression analysis to answer objective 1 and 2 of this study.

Table 4.10  
Summary of the Results of Correlation Analysis

| Variable(s)              | Statement on Bivariate Relationship  | Result      | Degree of Common Variance       |
|--------------------------|--|-------------|---------------------------------|
| Entrepreneurial Strategy | Entrepreneurial bricolage is positively related to nascent venture performance                     | significant | Slight, almost negligible       |
|                          | Entrepreneurial orientation of innovativeness is positively related to nascent venture performance | significant | Slight, almost negligible       |
|                          | Entrepreneurial orientation of proactiveness is positively related to nascent venture performance  | significant | moderate                        |
|                          | Entrepreneurial orientation of riskiness is positively related to nascent venture performance      | significant | Small but definite relationship |
| Resources acquisition    | Government assistance program is positively related to nascent venture performance                 | significant | Slight, almost negligible       |
|                          | Social networking is positively related to nascent venture performance                             | significant | Slight, almost negligible       |

#### 4.5 Multiple Regression Analysis

As a predictive analysis, we employed the multiple regression analysis to determine the causal effect of the relationship between independent variables and dependent variable. In addition, multiple regression analysis was also employed due to its ability to perform rigorous and simultaneous assessment of the independent variables. While correlation was used to find the relationship between variable and the strengths of variable through the coefficient of  $r$ , in multiple regression analysis the  $R$  square value tends to overestimate variance in DV. As such, the Adjusted  $R$  square value is referred to (Argyrous, 2011). This analysis suits in answering objectives 1 and 2 where it used to determine the cause and effect between ventures strategies and nascent venture performance. Hence, the hypotheses below were formulated according to research objectives and previous literature review;

H1: The venture strategy of entrepreneurial bricolage has a significant effect on nascent venture performance.

H2a: The venture strategy of entrepreneurial orientation (innovativeness) has a significant effect on nascent venture performance.

H2b: The venture strategy of entrepreneurial orientation (proactiveness) has a significant effect on nascent venture performance.

H2c: The venture strategy of entrepreneurial orientation (riskiness) has a significant effect on nascent venture performance.

#### **4.5.1 The relationship between entrepreneurial strategies (Entrepreneurial Bricolage, Entrepreneurial Orientation-Innovativeness, Entrepreneurial Orientation-Proactiveness, Entrepreneurial Orientation-Riskiness) and nascent venture performance**

Multiple regression analysis was conducted to test the hypotheses H1, H2a, H2b, and H2c respectively. Multiple regression analysis signifies the predictive power of independent variables towards the dependent variables. The coefficient of determination  $R^2$  value indicates model fit. In the light of suggestions proposed by Cohen (1988),  $R^2$  value of 0.02 indicates poor model fit or weak contribution of the model,  $R^2$  value of 0.13 is considered as a moderate level of model fit, whereas  $R^2$  value of 0.26 and above indicates substantial contribution of the model or in other words it indicates good model fit. Table 4.11 presents the significance of relationship between predictor and criterion variables in order to test H1, H2a, H2b, and H2c. Results suggest that H1 and H2b of the predictor variables have a significant positive impact on criterion variable. The coefficient of determination  $R^2$  value of 0.518 indicated good model fit. Significant F value of 0.000 indicates that the model is significant at  $p < 0.05$ . Durbin-Watson's value of 1.905 indicates that there is no occurrence of autocorrelation as the value lies in the acceptable range of 1.5 to 2.5 as suggested by Durbin and Watson (1951).

For the impact of entrepreneurial bricolage on nascent venture performance; standardized coefficient beta value of 0.108 at  $p < 0.1$  indicates a positive significant impact of entrepreneurial strategy of bricolage on nascent venture performance. Similarly, for the relationship between entrepreneurial orientation of proactiveness and nascent venture performance, standardized coefficient beta value of 0.445 at  $p < 0.01$  indicates the existence of very strong and positively significant relationship.

Table 4.11  
*Multiple Regression Analysis*

| <b>Variable (s)</b>                                  | <b>Beta</b>   | <b>T</b> | <b>Sig</b> |
|--|---------------|----------|------------|
| Entrepreneurial Bricolage (EB)                       | .108          | 1.679    | .095       |
| Entrepreneurial Orientation-Innovativeness (EO_INNO) | .090          | 1.372    | .172       |
| Entrepreneurial Orientation-Proactiveness (EO_PRO)   | .445          | 6.558    | .000       |
| Entrepreneurial Orientation-Riskiness (EO_RT)        | .080          | 1.183    | .238       |
| <b>R<sup>2</sup></b>                                 | <b>.518</b>   |          |            |
| <b>Adj R<sup>2</sup></b>                             | <b>.282</b>   |          |            |
| <b>F Value</b>                                       | <b>16.295</b> |          |            |
| <b>F Value sig</b>                                   | <b>.000</b>   |          |            |
| <b>Durbin-watson</b>                                 | <b>1.851</b>  |          |            |
| <b>N</b>   | <b>183</b>    |          |            |

Note. Dependent Variable: Nascent Venture Performance (NVP).  $P > 0.1$ ,  $P > 0.05$ ,  $P > 0.01$ .

Findings from Table 4.11 revealed that only two relationships of variable found to be not significant with dependent variable, nascent venture performance. Innovativeness was not significant with nascent venture performance at  $\beta = .090$ ,  $t = 1.372$ ,  $p > .05$  and Riskiness was not significant with nascent venture performance at  $\beta = .080$ ,  $t = 1.183$ ,  $p > .05$ . therefore, we reject hypothesis 2a and hypothesis 2c. Meanwhile, entrepreneurial bricolage and proactiveness was positively significant with nascent venture performance. Entrepreneurial bricolage was significant at  $\beta = .108$ ,  $t = 1.679$ ,  $p > .1$ . meanwhile, proactiveness was significant at  $\beta = .445$ ,  $t = 6.558$ ,  $p > .01$ . Thus, hypothesis 1 and hypothesis 2b were accepted. With this finding, research research objective 3 were achieved. Table 4.12 summarized the findings of multiple regression analysis.

Table 4.12  
*Summary of the Results of Hypothesis Testing on Multivariate Analysis of Multiple Regression*

| <b>Hypothesis</b> | <b>Statement on multiple regression relationship</b>  | <b>Decision</b> |
|-------------------|---|-----------------|
| Hypothesis 1      | Entrepreneurial strategy of bricolage has a significant effect on nascent venture performance | Support         |



---

|              |  |             |
|--------------|--|-------------|
| Hypothesis 2 | (a) Entrepreneurial strategy of innovativeness has a significant effect on nascent venture performance | Not support |
|              | (b) Entrepreneurial strategy of proactiveness has a significant effect on nascent venture performance  | Support     |
|              | (c) Entrepreneurial strategy of riskiness has a significant effect on nascent venture performance      | Not support |

---

#### 4.6 Hierarchical Regression Analysis

After performing multiple regression analysis, hierarchical regression analysis was deployed in this study to compute the significance of each added variable (or set of variables) to the explanation reflected in R-square. This hierarchical procedure is alternate method in comparing betas for the purpose of assessing the importance of the independents. To answering objectives 4,5,6 and 7, moderated hierarchical regression analysis is among preferred and most frequently used method to detect the moderating effects (Cohen & Cohen, 1983; Aiken & West, 1991 ; Russel & Bobko, 1992; Cohen et al., 2003; Fairchild & McQuillin, 2010).

Using steps by Baron and Kenny (1986), the hierarchical moderated regression analysis were employed using SPSS version 22. As the method of baron and Kenny has been critisized by current researchers, the macro-PROCESS method introduced by Hayes (2012) also were employed in this study. By employing the macro-PROCESS of moderated bootstrapping, the effect size of moderator also was presence. In order to identify types of moderator, Bontis and Serenko (2007) introduced the quadrant schemes where the moderator can be identified as not moderator, homologizer, quasi moderator and pure moderator. Detailed discussions of types of moderator can be

referred at subsection 3.9.5. The graph of moderation also was presence to plot the interaction points to interpret the moderator interaction. The graph was plotted using *worksheet plots two-way interaction effects for standardised variables* by Jeremy Dawson through his website at [www.jeremydawson.co.uk/slopes.htm](http://www.jeremydawson.co.uk/slopes.htm). Hence, the hypotheses below were formulated according to research objectives and previous literature review and development of hypotheses in the previous chapter;

H3: Government assistance program moderated the relationship between entrepreneurial bricolage and nascent venture performance.

H4: Government assistance program moderated the relationship between entrepreneurial orientation and nascent venture performance.

H4a: Government assistance program moderated the relationship between innovativeness and nascent venture performance.

H4b: Government assistance program moderated the relationship between proactiveness and nascent venture performance.

H4c: Government assistance program moderated the relationship between riskiness and nascent venture performance.

H5: Online social networking adoption moderated the relationship between entrepreneurial bricolage and nascent venture performance.

H6: Online social networking adoption moderated the relationship between entrepreneurial orientation and nascent venture performance.

H6a: Online social networking adoption moderated the relationship between innovativeness and nascent venture performance.

H6b: Online social networking adoption moderated the relationship between proactiveness and nascent venture performance.

H6c: Online social networking adoption moderated the relationship between riskiness and nascent venture performance.

The hierarchical regression results were reported according to the analysis stage. This study followed the method of Frazier, Tix, and Barron (2004). Before proceeding to get the interaction terms to measure the moderating effect, all the variables meant to be used were standardized. This means that the mean of each variable was subtracted from all the values of that variable and subsequently all the values of the variable were divided by its standard deviations. Since this research involves two moderating variables (GAP and OSN), hierarchical multiple regression may then involve a series of regressions for each variable as well as for the ultimate dependent. Output of hierarchical regression analysis according to Baron and Kenny (1986), output for macro-PROCESS by Hayes (2012) and graph can be referred in Appendix J. Subsection below discussed the findings of hierarchical regression analysis and macro-PROCESS of bootstrapping analysis on the moderator of government assistance program (GAP) and online social networking (OSN).

#### **4.6.1 The moderating effect of government assistance program**

In the later discussion, the findings were represent based on hypothesis developed in chapter four. Findings below showed the hierarchical moderated regression, macro-PROCESS, types of moderation and graph of government assistance program as a moderator for the relationship between entrepreneurial bricolage, EO of innovativeness, EO of proactiveness, EO of riskiness and nascent venture performance.

The discussions of findings answered research objectives 3 and 4, and resolved the hypotheses 3, 4a, 4b, and 4c.

#### 4.6.1.1 The moderating effect of government assistance program on the relationship between entrepreneurial bricolage and nascent venture performance

Table 4.13 below reported the findings of government assistance program as a moderator through hierarchical analysis. This section focused on the moderating effect of government assistance program on the relationship between entrepreneurial bricolage and nascent venture performance. Model 1 indicates a good fit of model where 51.8 percent explains all the variability of the response data around its mean. Entrepreneurial bricolage and proactiveness has a significant effect on nascent venture performance at ( $p > 0.1$  and  $p > 0.01$ ). Significance F change also indicates a significance value of the model. In the model 2, the variable of government assistance program (GAP) was included and resulted and increament at R value at 0.531, R squared at 0.262.

Table 4.13

*Result of hierarchical regression analysis for the moderator government assistance program on the entrepreneurial bricolage-nascent venture performance relationship*

| Independent variable                         | Model 1           | Model 2           | Model 3           |
|--|-------------------|-------------------|-------------------|
| <u>Model variable</u>                        |                   |                   |                   |
| <b>Entrepreneurial bricolage (EB)</b>        | <b>.108*</b>      | <b>.110*</b>      | <b>.078</b>       |
| Entreprenuerial Orientation (innovativeness) | .090              | .081              | .082              |
| Entreprenuerial Orientation (proactiveness)  | .445***           | .448***           | .448***           |
| Entreprenuerial Orientation (riskiness)      | 0.80              | .062              | .063              |
| <u>Moderating variable</u>                   |                   |                   |                   |
| Government assistance program (GAP)          |                   | .122*             | .052              |
| <u>Interaction terms</u>                     |                   |                   |                   |
| EB_GAP                                       |                   |                   | .076              |
| R  | .518 <sup>a</sup> | .531 <sup>b</sup> | .531 <sup>c</sup> |
| R <sup>2</sup>                               | .268              | .282              | .282              |
| Adj. R <sup>2</sup>                          | .252              | .262              | .258              |

|               |      |      |      |
|---------------|------|------|------|
| Sig. F Change | .000 | .061 | .899 |
|---------------|------|------|------|

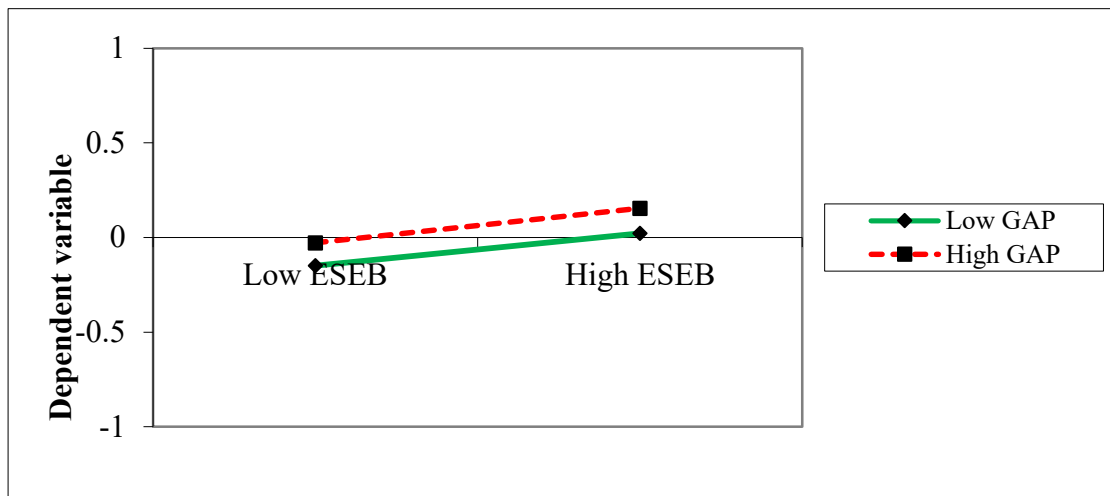
In this model also, GAP was found to have significant effect on nascent venture performance at ( $\beta = 0.122$ ,  $p > 0.1$ ). The final model of model 3 explained the insignificant result of moderated variable after inclusion of interaction term. In the model 3, only proactiveness have significant effect on nascent venture performance, meanwhile other independent variables and moderator variable was not significant. Result also yielded the same value of r squared with model 2 where ( $R = 0.531$ ,  $R^2 = 0.282$ ,  $\text{Adj. } R^2 = 0.252$ ,  $F \text{ Change} = 0.899$ ,  $p > 0.1$ ). Although the moderator variable enhanced the model, however significance F change do not significant. Findings indicated government assistance program did not moderated the relationship between entrepreneurial bricolage and nascent performance of malay owned venture in malaysia.

As the recent studies of social sciences debated the intervening variables steps developed by Baron and Kenny (1986), we employed the macro-PROCESS analysis of bootstrapping introduced by Hayes (2012) to see the differences between both result. Using macro-Process by Hayes (2012), dependent variable, independent variable and moderator variable were included in the process, and data was bootstrapped with 1000 and result as shown in figure 4.2 below.

| Model Summary                            |         |         |        |          |          |         |
|--|---------|---------|--------|----------|----------|---------|
| *****                                    |         |         |        |          |          |         |
| R  | R-sq    | MSE     | F      | df1      | df2      | p       |
| .2085                                    | .0435   | 12.4845 | 2.7123 | 3.0000   | 179.0000 | .0464   |
| *****                                    |         |         |        |          |          |         |
| Model                                    |         |         |        |          |          |         |
|  | coeff   | se      | t      | p        | LLCI     | ULCI    |
| constant                                 | 10.2225 | 8.9928  | 1.1367 | .2572    | -7.5230  | 27.9679 |
| TGAPfa                                   | .3413   | .3803   | .8974  | .3707    | -.4092   | 1.0918  |
| TEBfa                                    | .4088   | .3766   | 1.0856 | .2791    | -.3343   | 1.1519  |
| int_1                                    | -.0104  | .0160   | -.6544 | .5137    | -.0419   | .0210   |
| Product terms key:                       |         |         |        |          |          |         |
| int_1                                    | TEBfa   | X       | TGAPfa |          |          |         |
| R-square increase due to interaction(s): |         |         |        |          |          |         |
|  | R2-chng | F       | df1    | df2      | p        |         |
| int_1                                    | .0023   | .4283   | 1.0000 | 179.0000 | .5137    |         |
| *****                                    |         |         |        |          |          |         |

*Figure 4.2.* Result of macro-PROCESS of bootstrapping analysis of government assistance program in relationship entrepreneurial bricolage and nascent venture performance.

Model summary above showed the moderator is not significant ( $R^2 = 0.0435$ , F value = 2.7123,  $p > 0.01$ ). the  $R^2$  increased as 0.0023 due to interaction. However, the p value for GAP as moderator found to be not significant at ( $\beta = 0.3413$ ,  $t = 0.8974$ ,  $p > 0.01$ ) meanwhile the interaction term also found to be not significant ( $\beta = -0.0104$ ,  $t = 0.0160$ ,  $p > 0.01$ ). In addition, the interaction zero value of lower level confidence interval (LLCI) and upper level confidence interval (ULCI) fall within this two group (-0.419, 0.0210), suggesting that the moderator variable is not significant. In summary, the result from hierarchical regression analysis as presented in table 4.13 and result from macro-PROCESS as shown in figure 4.2 proved that government assistance program did not moderates the relationship between entrepreneurial bricolage and nascent venture performance. Therefore, we reject hypothesis 3. On the other hand, government assistance program was related to nascent venture performance and do not have interaction with entrepreneurial bricolage. Thus, from the quadrant underline by Bontis & Serenko, (2007), government assistance program was not a moderator.



*Figure 4.3.* Interaction graph of government assistance program in entrepreneurial bricolage and nascent venture performance relationship.

Figure 4.3 above depicts the effect of moderator in a form of graph. Since the moderator variable was not present, the graph did not intercept between ventures which were low in utilizing government assistance programs and fully utilized government assistance programs for their ventures. The graph below showed parallel effect where there is no interaction occurs, however, the condition for high ESEB is much better than low ESEB. This result signifies, ventures which acquires bricolage strategy is slightly engaged more with government assistance programs.

#### **4.6.1.2 The moderating effect of government assistance program on the relationship between entrepreneurial orientation of innovativeness and nascent venture performance**

Similar with previous discussion, Table 4.14 below reported the findings of government assistance program as a moderator through hierarchical analysis. This section focused on the moderating effect of government assistance program on the relationship between entrepreneurial orientation of innovativeness and nascent venture performance. Model

1 indicates a good fit of model where 51.8 percent explains all the variability of the response data around its mean. Entrepreneurial bricolage and proactiveness has a significant effect on nascent venture performance at ( $p > 0.1$  and  $p > 0.01$ ). Significance F change also indicates a significance value of the model. In the model 2, the variable of government assistance program (GAP) was included and resulted and increment at R value at 0.531, in this model also, GAP was found to have significant effect on nascent venture performance at ( $\beta = 0.122$ ,  $p > 0.1$ ). The final model of model 3 explained the insignificant result of moderated variable after inclusion of interaction term. In the model 3, only proactiveness have significant effect on nascent venture performance, meanwhile other independent variables and moderator variable was not significant.

Table 4.14

*Result of hierarchical regression analysis for the moderator government assistance program on the entrepreneurial orientation of innovativeness-nascent venture performance relationship*

| Independent variable                                | Model 1           | Model 2           | Model 3           |
|---|-------------------|-------------------|-------------------|
| <u>Model variable</u>                               |                   |                   |                   |
| Entrepreneurial bricolage (EB)                      | .108*             | .110*             | .105              |
| <b>Entrepreneurial Orientation (innovativeness)</b> | <b>.090</b>       | <b>.081</b>       | <b>.266</b>       |
| Entrepreneurial Orientation (proactiveness)         | .445***           | .448***           | .447***           |
| Entrepreneurial Orientation (riskiness)             | 0.80              | .062              | .064              |
| <u>Moderating variable</u>                          |                   |                   |                   |
| Government assistance program (GAP)                 |                   | .122*             | .332              |
| <u>Interaction terms</u>                            |                   |                   |                   |
| INNO_GAP  |                   |                   | -.338             |
| R   | .518 <sup>a</sup> | .531 <sup>b</sup> | .534 <sup>c</sup> |
| R <sup>2</sup>                                      | .268              | .282              | .285              |
| Adj. R <sup>2</sup> = 0.252                         | .252              | .262              | .261              |
| Sig. F Change                                       | .000              | .061              | .432              |

Result in model 3 yielded little increment in value of r squared with model where ( $R = 0.534$ ,  $R^2 = 0.285$ ,  $\text{Adj. } R^2 = 0.261$   $F \text{ Change} = 0.432$ ,  $p > 0.1$ ). Although the



moderator variable enhanced the model, however significance F change do not have significance effect. Findings indicated government assistance program did not moderated the relationship between entrepreneurial orientation of innovativeness and nascent performance of malay owned venture in malaysia.

Later, we employed the macro-PROCESS analysis of bootstrapping introduced by Hayes (2012) to see the differences between both result. Using this analysis, dependent variable of nascent venture performance, independent variable of innovativeness and moderator variable of government assistance program were included in the process, and data was bootstrapped with 1000 and result as shown in figure 4.4 below.

| Model Summary                            |         |         |        |          |          |         |
|--|---------|---------|--------|----------|----------|---------|
| *****                                    |         |         |        |          |          |         |
| R  | R-sq    | MSE     | F      | df1      | df2      | p       |
| .2404                                    | .0578   | 12.2974 | 3.6611 | 3.0000   | 179.0000 | .0135   |
| *****                                    |         |         |        |          |          |         |
| Model                                    |         |         |        |          |          |         |
|  | coeff   | se      | t      | p        | LLCI     | ULCI    |
| constant                                 | 11.9974 | 5.4773  | 2.1904 | .0298    | 1.1890   | 22.8057 |
| TGAPfa                                   | .2918   | .2337   | 1.2484 | .2135    | -.1694   | .7529   |
| TINNOfa                                  | .7505   | .4948   | 1.5167 | .1311    | -.2259   | 1.7270  |
| int_1                                    | -.0191  | .0210   | -.9112 | .3634    | -.0604   | .0223   |
| Product terms key:                       |         |         |        |          |          |         |
| int_1                                    | TINNOfa | X       | TGAPfa |          |          |         |
| R-square increase due to interaction(s): |         |         |        |          |          |         |
|  | R2-chng | F       | df1    | df2      | p        |         |
| int_1                                    | .0044   | .8304   | 1.0000 | 179.0000 | .3634    |         |
| *****                                    |         |         |        |          |          |         |

*Figure 4.4.* Result of macro-PROCESS of bootstrapping analysis of government assistance program in relationship entrepreneurial orientation of innovativeness and nascent venture performance.

Model summary above showed the moderator is not significant ( $R = 0.2404$ ,  $R^2 = 0.0578$ ,  $F$  value = 3.6611,  $p > 0.01$ ). the  $R^2$  increased as 0.0044 due to interaction. However, the  $p$  value for GAP as moderator found to be not significant at ( $\beta = 0.2918$ ,  $t = 1.2484$ ,  $p > 0.01$ ) meanwhile the interaction term also found to be not significant ( $\beta =$

-0.0191,  $t = -0.9112$ ,  $p > 0.01$ ). In addition, the interaction zero value of lower level confidence interval (LLCI) and upper level confidence interval (UPCI) fall within this two group (-0.0604, 0.0223), suggesting that the moderator variable is not significant.

In summary, the result from hierarchical regression analysis as presented in Table 4.14 and result from macro-PROCESS as shown in Figure 4.4 proved that government assistance program did not moderates the relationship between entrepreneurial bricolage and nascent venture performance. Therefore, we reject hypothesis 4a. On the other hand, similar with previous discussion, government assistance program was related to nascent venture performance and do not have interaction with innovativeness. Thus, from the quadrant underline by Bontis & Serenko, (2007), government assistance program was not a moderator. Figure 4.5 depicts the effect of moderator in a form of graph. Since the moderator variable was not present, the graph did not intercept between ventures which were low in utilizing government assistance programs and fully utilized government assistance programs for their ventures. The graph below showed parallel effect where there is no interaction occurs, however, the condition for high INNO is much better than low INNO. This result signifies, ventures which perceived innovativeness strategy is engaged more with government assistance programs.

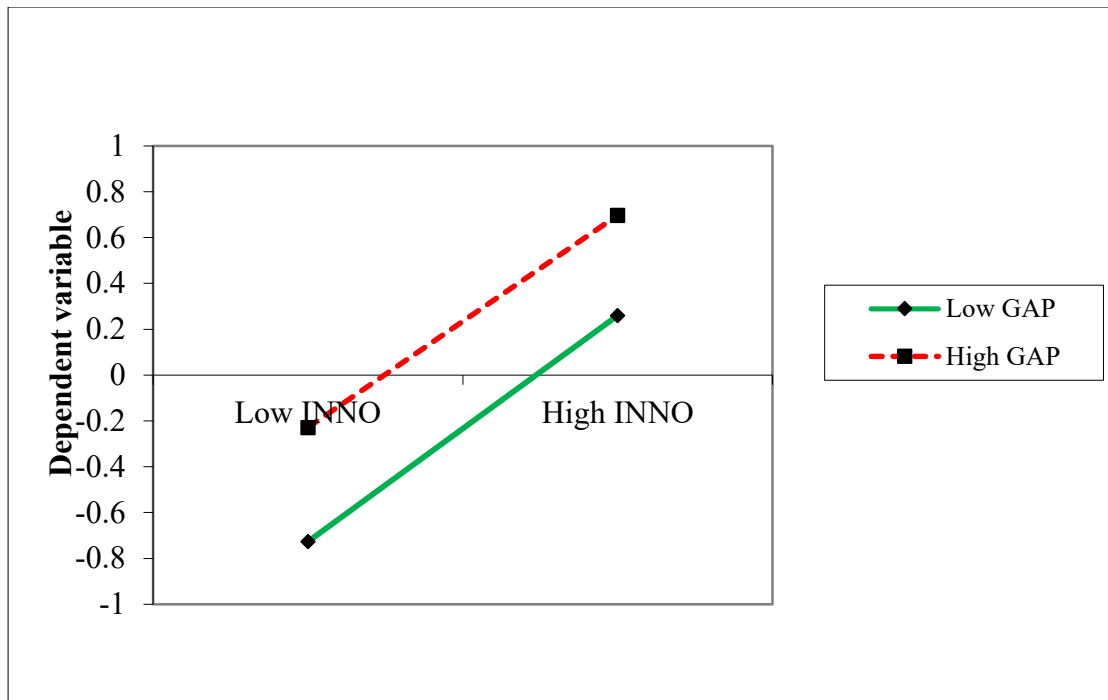


Figure 4.5. Interaction graph of government assistance program in entrepreneurial orientation of innovativeness and nascent venture performance relationship.

#### 4.6.1.3 The moderating effect of government assistance program on the relationship between entrepreneurial orientation of proactiveness and nascent venture performance

This section focused on the moderating effect of government assistance program on the relationship between entrepreneurial orientation of proactiveness and nascent venture performance. Table 4.15 below reported the findings of government assistance program as a moderator through hierarchical analysis. Model 1 indicates a good fit of model where 51.8 percent explains all the variability of the response data around its mean. Entrepreneurial bricolage and proactiveness has a significant effect on nascent venture performance at ( $p > 0.1$  and  $p > 0.01$ ). Significance F change also indicates a significance value of the model. In the model 2, the variable of government assistance program (GAP) was included and resulted and increment at R squared at 0.531, in this model also, GAP was found to have significant effect on nascent venture performance at ( $\beta = 0.122$ ,  $p > 0.1$ ).

Table 4.15

*Result of hierarchical regression analysis for the moderator government assistance program on the entrepreneurial orientation of proactiveness-nascent venture performance relationship*

| Independent variable                               | Model 1           | Model 2           | Model 3           |
|--|-------------------|-------------------|-------------------|
| <u>Model variable</u>                              |                   |                   |                   |
| Entrepreneurial bricolage (EB)                     | .108*             | .110*             | .097              |
| Entrepreneurial Orientation (innovativeness)       | .090              | .081              | .071              |
| <b>Entrepreneurial Orientation (proactiveness)</b> | <b>.445***</b>    | <b>.448***</b>    | <b>.955***</b>    |
| Entrepreneurial Orientation (riskiness)            | 0.80              | .062              | .068              |
| <u>Moderating variable</u>                         |                   |                   |                   |
| Government assistance program (GAP)                |                   | .122*             | .799**            |
| <u>Interaction terms</u>                           |                   |                   |                   |
| INNO _ GAP   |                   |                   | -.867*            |
| R  | .518 <sup>a</sup> | .531 <sup>b</sup> | .543 <sup>c</sup> |
| R <sup>2</sup>                                     | .268              | .282              | .295              |
| Adj. R <sup>2</sup>                                | .252              | .262              | .271              |
| Sig. F Change                                      | .000              | .061              | .076              |

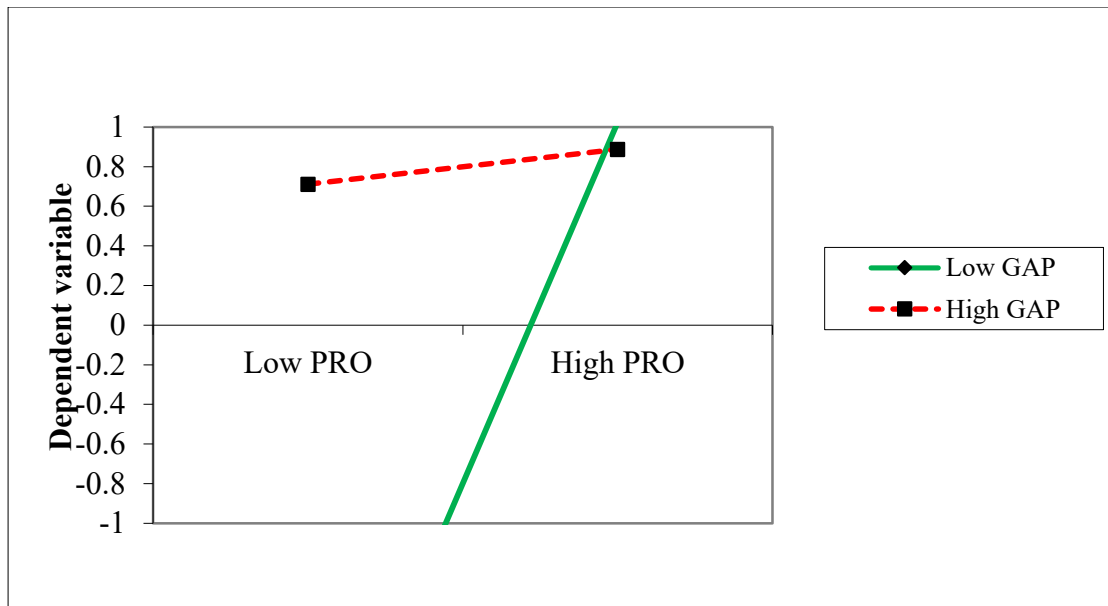
The model 3 explained the significant result of moderated variable after inclusion of interaction term. In the model 3, proactiveness found to have significant effect ( $\beta = 0.955$ ,  $p > 0.01$ ) on nascent venture performance, meanwhile government assistance program found to be significant at ( $\beta = 0.799$ ,  $p > 0.05$ ) and interaction term also found to be significant at ( $\beta = -0.867$ ,  $p > 0.1$ ). Result in model 3 yielded better increment in value of  $r$  with model where ( $R = 0.543$ ,  $R^2 = 0.295$ ,  $\text{Adj. } R^2 = 0.271$ ,  $F \text{ Change} = 0.432$ ,  $p > 0.1$ ). This finding proved the moderator variable enhanced the model, where significance  $F$  change found to have significance effect at  $p > 0.1$ . Findings indicated government assistance program negatively moderated the relationship between entrepreneurial orientation of proactiveness and nascent performance of malay owned venture in malaysia.

| Model Summary                            |          |        |         |          |          |          |
|--|----------|--------|---------|----------|----------|----------|
|  | R        | R-sq   | MSE     | F        | df1      | df2      |
|  | .5256    | .2763  | 9.4460  | 22.7775  | 3.0000   | 179.0000 |
| Model                                    |          |        |         |          |          |          |
|  | coeff    | se     | t       | p        | LLCI     | ULCI     |
| constant                                 | -1.2381  | 5.9083 | -.2096  | .8343    | -12.8969 | 10.4207  |
| TGAPfa                                   | .5520    | .2341  | 2.3584  | .0194    | .0901    | 1.0139   |
| TEOPROfa                                 | 1.8704   | .5097  | 3.6696  | .0003    | .8646    | 2.8762   |
| int_1                                    | -.0409   | .0201  | -2.0339 | .0434    | -.0806   | -.0012   |
| Product terms key:                       |          |        |         |          |          |          |
| int_1                                    | TEOPROfa | X      | TGAPfa  |          |          |          |
| R-square increase due to interaction(s): |          |        |         |          |          |          |
|  | R2-chng  | F      | df1     | df2      | p        |          |
| int_1                                    | .0167    | 4.1366 | 1.0000  | 179.0000 | .0434    |          |

Figure 4.6. Result of macro-PROCESS of bootstrapping analysis of government assistance program in relationship entrepreneurial orientation of proactiveness and nascent venture performance.

The data was bootstrapped using Macro-PROCESS with 1000 and result as shown in figure 4.6 above. Model summary above showed the moderator is significant where ( $R = 0.5256$ ,  $R^2 = 0.2763$ ,  $F$  value = 22.7775,  $p > 0.01$ ). The  $R^2$  increased as 0.0167 due to interaction. Meanwhile, the  $p$  value for GAP as moderator found to be significant at ( $\beta = 0.5520$ ,  $t = 2.3584$ ,  $p > 0.05$ ) meanwhile the interaction term also found to be significant ( $\beta = -0.0409$ ,  $t = -2.0339$ ,  $p > 0.05$ ). In addition, the interaction zero value of lower level confidence interval (LLCI) and upper level confidence interval (ULCI) do not fall within this two group (-0.0806, -0.012), suggesting that the moderator variable is negatively moderated the relationship proactiveness and nascent venture performance.

The result from hierarchical regression analysis as presented in table 4.15 and result from macro-PROCESS as shown in figure 4.6 proved that government assistance program moderated the relationship between entrepreneurial orientation of proactiveness and nascent venture performance. Therefore, we accept hypothesis 4b.



*Figure 4.7.* Interaction graph of government assistance program in entrepreneurial orientation of proactiveness and nascent venture performance relationship.

In analyzing the type of moderator, The quasi moderator can be observed by exhibited findings in table 4.15 and figure 4.6, government assistance program was related to nascent venture performance and have interaction with proactiveness. Thus, from the quadrant underline by Bontis & Serenko, (2007), government assistance program was a quasi moderator. They also explained that, “a variable that not only is a predictor itself, but also interacts with the predictor variable is considered a quasi moderator. Pure and quasi moderators modify the form of the relationship between the predictor and criterion” (Bontis & Serenko, 2007, pg. 34).

Since the moderator was negatively significant, thus it modifies the effect on nascent venture performance. Figure 4.7 above depicts the effect of moderator in a form of graph. Since the moderator variable was present, the graph high proactiveness to show most nascent venture were proactive in doing business. The interaction terms also signify that nascent ventures which were more proactive in doing business, requires less assistance from government in doing business.

#### 4.6.1.4 The moderating effect of government assistance program on the relationship between entrepreneurial orientation of riskiness and nascent venture performance.

Model 1 indicates a good fit of model where 51.8 percent explains all the variability of the response data around its mean. Entrepreneurial bricolage and proactiveness has a significant effect on nascent venture performance at ( $p > 0.1$  and  $p > 0.01$ ). Significance F change also indicates a significance value of the model. In the model 2, the variable of government assistance program (GAP) was included and resulted and increment at R value at 0.531, in this model also, GAP was found to have significant effect on nascent venture performance at ( $\beta = 0.122$ ,  $p > 0.1$ ).

Table 4.16

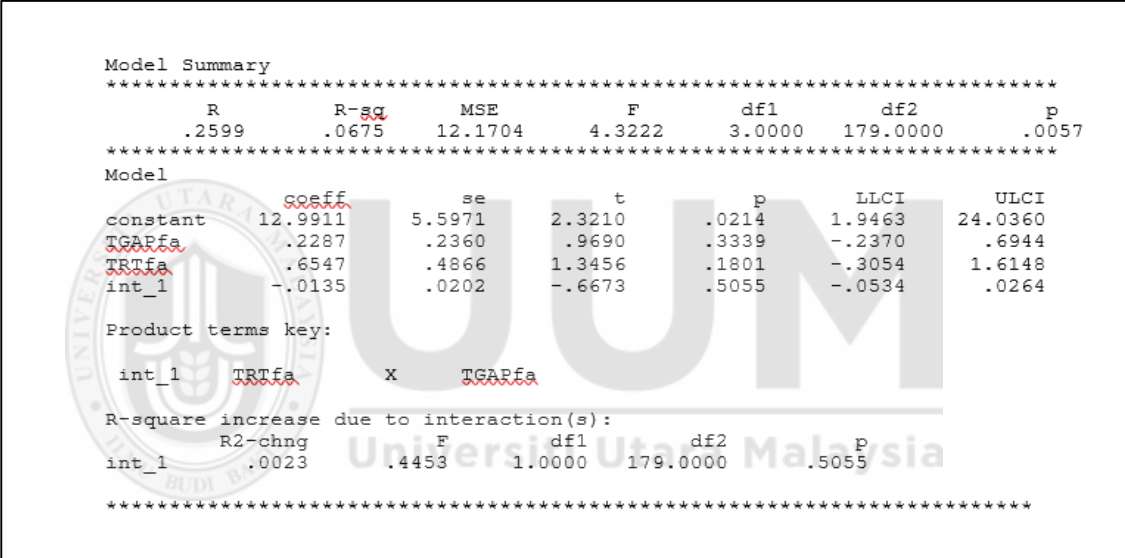
*Result of hierarchical regression analysis for the moderator government assistance program on the entrepreneurial orientation of riskiness-nascent venture performance relationship*

| Independent variable                           | Model 1           | Model 2           | Model 3           |
|--|-------------------|-------------------|-------------------|
| <u>Model variable</u>                          |                   |                   |                   |
| Entrepreneurial bricolage (EB)                 | .108*             | .110*             | .103              |
| Entrepreneurial Orientation (innovativeness)   | .090              | .081              | .070              |
| Entrepreneurial Orientation (proactiveness)    | .445***           | .448***           | .457***           |
| <b>Entrepreneurial Orientation (riskiness)</b> | <b>0.80</b>       | <b>.062</b>       | <b>.397</b>       |
| <u>Moderating variable</u>                     |                   |                   |                   |
| Government assistance program (GAP)            |                   | .122*             | .564              |
| <u>Interaction terms</u>                       |                   |                   |                   |
| RT_GAP   |                   |                   | -.600             |
| R  | .518 <sup>a</sup> | .531 <sup>b</sup> | .538 <sup>c</sup> |
| R <sup>2</sup>                                 | .268              | .282              | .289              |
| Adj. R <sup>2</sup>                            | .252              | .262              | .265              |
| Sig. F Change                                  | .000              | .061              | .091              |

The final model of model 3 explained the insignificant result of moderated variable after inclusion of interaction term. In the model 3, only proactiveness have significant effect on nascent venture performance, meanwhile other independent variables and moderator variable was not significant. Result in model 3 yielded little increment in value of r squared with model where ( $R = 0.538$ ,  $R^2 = 0.289$ ,  $\text{Adj. } R^2 = 0.265$ , F Change

= 0.091,  $p > 0.1$ ). Although the moderator variable enhanced the model, however significance F change do not have significance effect. Findings indicated government assistance program did not moderated the relationship between entrepreneurial orientation of riskiness and nascent performance of malay owned venture in malaysia.

Using macro-Process by Hayes (2012), dependent variable, independent variable and moderator variable were included in the process, and data was bootstrapped with 1000 and result as shown in figure 4.8 below.



```

Model Summary
*****
          R          R-sq      MSE          F          df1          df2          p
          .2599          .0675    12.1704         4.3222         3.0000        179.0000        .0057
*****

Model
          Coeff          se          t          p          LLCI          ULCI
constant    12.9911         5.5971         2.3210         .0214         1.9463        24.0360
TGAPfa       .2287         .2360         .9690         .3339        -.2370         .6944
TRTfa        .6547         .4866         1.3456         .1801        -.3054         1.6148
int_1        -.0135         .0202        -.6673         .5055        -.0534         .0264

Product terms key:
          int_1      TRTfa      X      TGAPfa

R-square increase due to interaction(s):
          R2-chng          F          df1          df2          p
int_1          .0023          .4453          1.0000        179.0000        .5055
*****

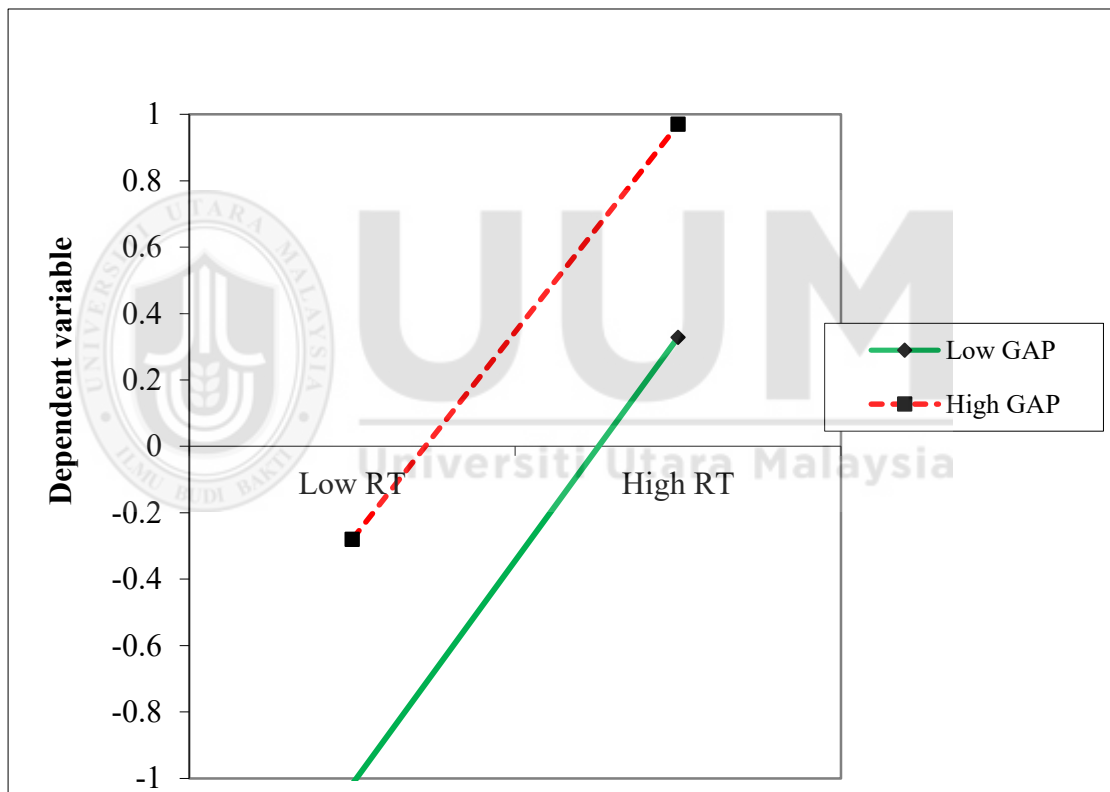
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*Figure 4.8.* Result of macro-PROCESS of bootstrapping analysis of government assistance program in relationship entrepreneurial orientation of riskiness and nascent venture performance.

Model for moderation above showed the moderator is not significant ( $R = 0.2599$ ,  $R^2 = 0.0675$ ,  $F$  value = 4.3222,  $p > 0.1$ ). the  $R^2$  increased as 0.0023 due to interaction. The  $p$  value for GAP as moderator found to be not significant at ( $\beta = 0.2287$ ,  $t = 0.9690$ ,  $p > 0.01$ ) meanwhile the interaction term also found to be not significant ( $\beta = -0.0135$ ,  $t = -0.6673$ ,  $p > 0.01$ ). In addition, the interaction zero value of lower level confidence interval (LLCI) and upper level confidence interval (ULCI) fall within this two group (-0.0534, 0.0264), suggesting that the moderator variable is not significant.



Findings showed that government assistance program did not moderate the relationship between entrepreneurial bricolage and nascent venture performance (refer table 4.16 and figure 4.8). Therefore, we reject hypothesis 4c. On the other hand, government assistance program was related to nascent venture performance and do not have interaction with riskiness. Thus, from the quadrant underline by Bontis & Serenko, (2007), government assistance program was not a moderator. Figure 4.9 depicts the effect of moderator in a form of graph.



*Figure 4.9.* Interaction graph of government assistance program in entrepreneurial orientation of riskiness and nascent venture performance relationship.

Since the moderator variable was not present, the graph did not intercept between ventures which were low in utilizing government assistance programs and fully utilized government assistance programs for their ventures. The graph below showed parallel effect where there is no interaction occurs, however, the condition for high RT is much

better than low RT and main effect was present. This result signifies, ventures which perceived more riskiness strategy is engaged more with government assistance programs.

#### **4.6.2 The moderating effect of online social networking**

In the later discussion, the findings were represent based on hypothesis 5, 6a, 6b and 6c developed in chapter four. Findings below showed the hierarchical moderated regression, macro-PROCESS, types of moderation and graph of online social networking as a moderator for the relationship between entrepreneurial bricolage, EO of innovativeness, EO of proactiveness, EO of riskiness and nascent venture performance.

##### **4.6.2.1 The moderating effect of online social networking on the relationship between entrepreneurial bricolage and nascent venture performance**

This section focused on the moderating effect of online social networking on the relationship between entrepreneurial bricolage of and nascent venture performance. Similar with previous discussion on government assistance program as a moderator, table 4.17 below reported the findings of online social networking as a moderator through hierarchical analysis and macro-PROCESS bootstrapping analysis. Model 1 indicates a good fit of model where 51.8 percent explains all the variability of the response data around its mean. Entrepreneurial bricolage and proactiveness has a significant effect on nascent venture performance at ( $p > 0.1$  and  $p > 0.01$ ). Significance F change also indicates a significance value of the model. In the model 2, the variable of online social networking (OSN) was included and resulted and increament at R value

at 0.538, in this model also, OSN was found to have significant effect on nascent venture performance at ( $\beta = 0.148, p > 0.05$ ).

Table 4.17

*Result of hierarchical regression analysis for the moderator online social networking on the entrepreneurial bricolage-nascent venture performance relationship*

| Independent variable                         | Model 1           | Model 2           | Model 3           |
|--|-------------------|-------------------|-------------------|
| <u>Model variable</u>                        |                   |                   |                   |
| <b>Entrepreneurial bricolage (EB)</b>        | <b>.108*</b>      | <b>.125*</b>      | <b>.078</b>       |
| Entrepreneurial Orientation (innovativeness) | .090              | .104              | .082              |
| Entrepreneurial Orientation (proactiveness)  | .445***           | .429***           | .448***           |
| Entrepreneurial Orientation (riskiness)      | 0.80              | .090              | .063              |
| <u>Moderating variable</u>                   |                   |                   |                   |
| Online social networking (OSN)               |                   | .148**            | .052              |
| <u>Interaction terms</u>                     |                   |                   |                   |
| EB_OSN                                       |                   |                   | .076              |
| R  | .518 <sup>a</sup> | .538 <sup>b</sup> | .538 <sup>c</sup> |
| R <sup>2</sup>                               | .268              | .289              | .290              |
| Adj. R <sup>2</sup>                          | .252              | .259              | .265              |
| Sig. F Change                                | .000              | .023              | .723              |

The final model of model 3 explained the insignificant result of moderated variable after inclusion of interaction term. In the model 3, only proactiveness have significant effect on nascent venture performance, meanwhile other independent variables and moderator variable was not significant. Result in model 3 yielded little increment in value of r squared with model where ( $R = 0.538, R^2 = 0.290, \text{Adj. } R^2 = 0.265, F \text{ Change} = 0.723, p > 0.1$ ). Although the moderator variable enhanced the model, however significance F change do not have significance effect. Findings indicated online social networking did not moderated the relationship between entrepreneurial bricolage and nascent performance of malay owned venture in malaysia. We employed the macro-PROCESS analysis of bootstrapping introduced by Hayes (2012) to see the differences between both result.

|  |              |         |               |          |          |          |       |
|--|--------------|---------|---------------|----------|----------|----------|-------|
| Model Summary                            |              |         |               |          |          |          |       |
| *****                                    |              |         |               |          |          |          |       |
|  | R            | R-sq    | MSE           | F        | df1      | df2      | p     |
|  | .2125        | .0452   | 12.4627       | 2.8214   | 3.0000   | 179.0000 | .0403 |
| *****                                    |              |         |               |          |          |          |       |
| Model                                    |              |         |               |          |          |          |       |
|  | coeff        | se      | t             | p        | LLCI     | ULCI     |       |
| constant                                 | 15.0493      | 18.8649 | .7977         | .4261    | -22.1768 | 52.2755  |       |
| <u>TOSNfa</u>                            | .0635        | .4639   | .1368         | .8913    | -.8520   | .9790    |       |
| <u>TEBfa</u>                             | .0883        | .7821   | .1128         | .9103    | -1.4551  | 1.6316   |       |
| int_1                                    | .0025        | .0193   | .1319         | .8952    | -.0355   | .0406    |       |
| Product terms key:                       |              |         |               |          |          |          |       |
| int_1                                    | <u>TEBfa</u> | X       | <u>TOSNfa</u> |          |          |          |       |
| R-square increase due to interaction(s): |              |         |               |          |          |          |       |
|  | R2-chng      | F       | df1           | df2      | p        |          |       |
| int_1                                    | .0001        | .0174   | 1.0000        | 179.0000 | .8952    |          |       |
| *****                                    |              |         |               |          |          |          |       |

Figure 4.10. Result of macro-PROCESS of bootstrapping analysis of online social networking in relationship entrepreneurial bricolage and nascent venture performance.

Using macro-Process by Hayes (2012), dependent variable, independent variable and moderator variable were included in the process, and data was bootstrapped with 1000 and result as shown in figure 4.10 above. Model summary above showed the overall model is significant ( $R = 0.2125$ ,  $R^2 = 0.0452$ ,  $F$  value = 2.8214,  $p > 0.05$ ). the  $R^2$  increased only by 0.0001 due to interaction. However, the  $p$  value for OSN as moderator found to be not significant at ( $\beta = 0.0635$ ,  $t = 0.1368$ ,  $p > 0.01$ ) meanwhile the interaction term also found to be not significant ( $\beta = 0.0025$ ,  $t = 0.1319$ ,  $p > 0.01$ ). In addition, the interaction zero value of lower level confidence interval (LLCI) and upper level confidence interval (ULCI) fall within this two group (-0.0355, 0.0406), suggesting that the moderator variable is not significant.

In summary, the result from hierarchical regression analysis as presented in table 4.17 and result from macro-PROCESS as shown in figure 4.10 proved that government assistance program did not moderates the relationship between entrepreneurial bricolage and nascent venture performance. Therefore, we reject hypothesis 5. On the other hand, since online social networking was related to nascent venture performance

and do not have interaction with entrepreneurial bricolage. Thus, from the quadrant underline by Bontis & Serenko, (2007), online social networking was not a moderator.

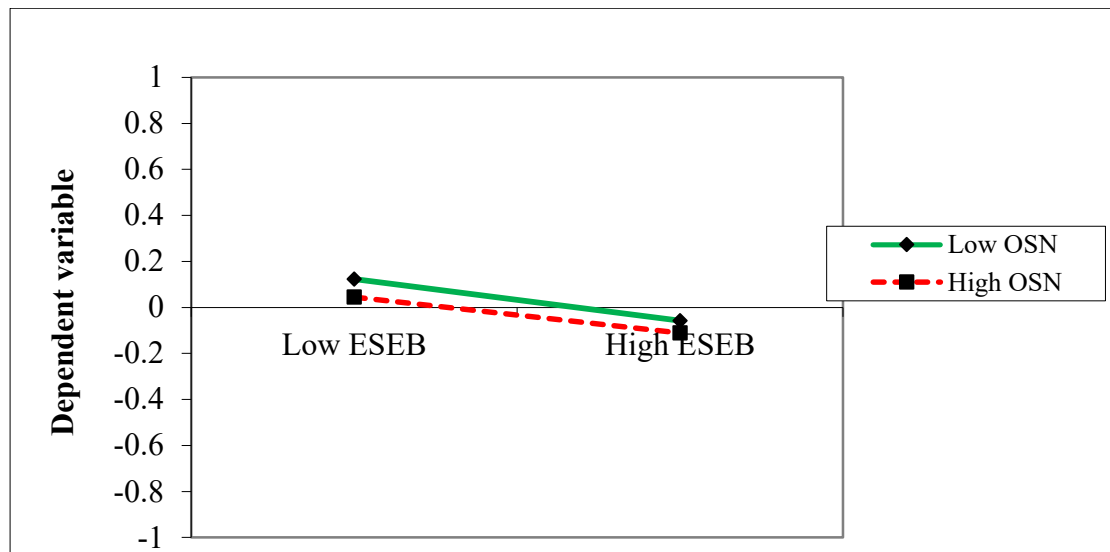


Figure 4.11. Interaction graph of online social networking in entrepreneurial bricolage and nascent venture performance relationship.

Figure 4.11 depicts the effect of moderator in a form of graph. Since the moderator variable was not present, the graph did not intercept between ventures which were low in adopting online social networking and fully adopting online social networking for their ventures. The graph below showed parallel effect where there is no interaction occurs, however, the condition for low ESEB is much better than high ESEB and main effect was present. This result signifies, ventures which perceived little bricolage strategy is slightly often in using online social networking for their business.

#### 4.6.1.2 The moderating effect of online social networking on the relationship between entrepreneurial orientation of innovativeness and nascent venture performance

This section focused on the moderating effect of government assistance program on the relationship between entrepreneurial orientation of innovativeness and nascent venture performance.

Table 4.18

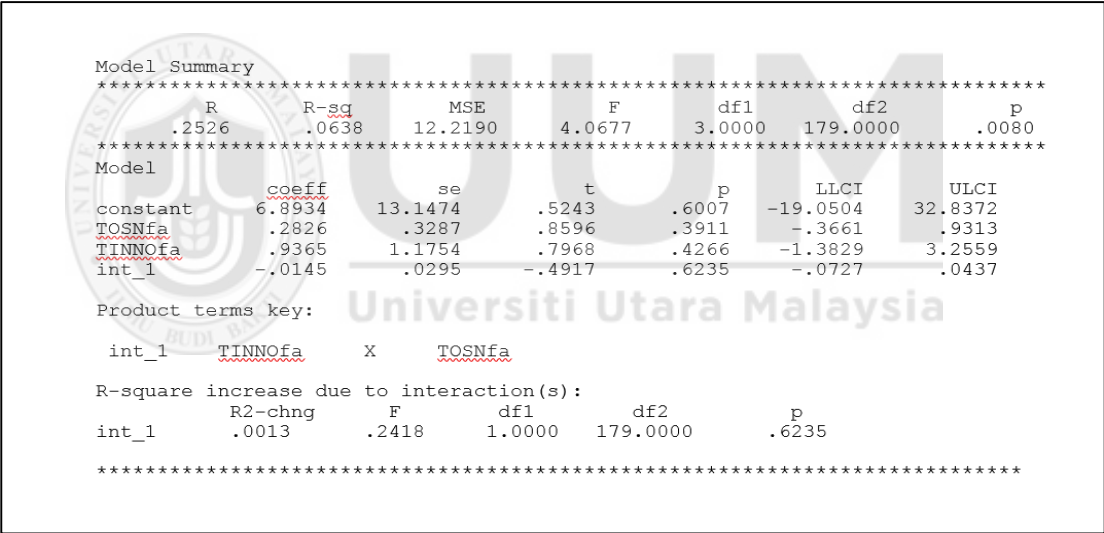
*Result of hierarchical regression analysis for the moderator online social networking on the entrepreneurial orientation of innovativeness-nascent venture performance relationship*

| <b>Independent variable</b>                         | <b>Model 1</b>    | <b>Model 2</b>    | <b>Model 3</b>    |
|---|-------------------|-------------------|-------------------|
| <u>Model variable</u>                               |                   |                   |                   |
| Entrepreneurial bricolage (EB)                      | .108*             | .125*             | .127              |
| <b>Entrepreneurial Orientation (innovativeness)</b> | <b>.090</b>       | <b>.104</b>       | <b>.208</b>       |
| Entrepreneurial Orientation (proactiveness)         | .445***           | .429***           | .428***           |
| Entrepreneurial Orientation (riskiness)             | 0.80              | .090              | .090              |
| <u>Moderating variable</u>                          |                   |                   |                   |
| Online social networking (OSN)                      |                   | .148**            | .218              |
| <u>Interaction terms</u>                            |                   |                   |                   |
| INNO_OSN  |                   |                   | -.122             |
| R   | .518 <sup>a</sup> | .538 <sup>b</sup> | .538 <sup>c</sup> |
| R <sup>2</sup>                                      | .268              | .289              | .289              |
| Adj. R <sup>2</sup>                                 | .252              | .269              | .265              |
| Sig. F Change                                       | .000              | .023              | .856              |

Similar with previous discussion, table 4.18 above reported the findings of government assistance program as a moderator through hierarchical analysis. Model 1 indicates a good fit of model where 51.8 percent explains all the variability of the response data around its mean. Entrepreneurial bricolage and proactiveness has a significant effect on nascent venture performance at ( $p > 0.1$  and  $p > 0.01$ ). Significance F change also indicates a significance value of the model. In the model 2, the variable of online social networking (OSN) was included and resulted and increment at R value at 0.538, in this model also, OSN was found to have significant effect on nascent venture performance at ( $\beta = 0.148$ ,  $p > 0.05$ ).

The final model of model 3 explained the insignificant result of moderated variable after inclusion of interaction term. In the model 3, only proactiveness have significant effect on nascent venture performance, meanwhile other independent variables and

moderator variable was not significant. Result in model 3 yielded little increment in value of r squared with model where ( $R = 0.538$ ,  $R^2 = 0.289$ ,  $\text{Adj. } R^2 = 0.265$ ,  $F \text{ Change} = 0.856$ ,  $p > 0.1$ ). Although the moderator variable enhanced the model, however significance  $F$  change do not have significance effect. Findings indicated online social networking did not moderated the relationship between entrepreneurial orientation of innovativeness and nascent performance of malay owned venture in malaysia. We employed the macro-PROCESS analysis of bootstrapping introduced by Hayes (2012) to see the differences between both result. Using macro-Process by Hayes (2012), dependent variable, independent variable and moderator variable were included in the process, and data was bootstrapped with 1000 and result as shown in Figure 4.12 below.



| Model Summary |       |       |         |        |        |          |
|---------------|-------|-------|---------|--------|--------|----------|
|               | R     | R-sq  | MSE     | F      | df1    | df2      |
|               | .2526 | .0638 | 12.2190 | 4.0677 | 3.0000 | 179.0000 |
|               |       |       |         |        |        | p        |
|               |       |       |         |        |        | .0080    |

| Model    | coeff  | se      | t      | p     | LLCI     | ULCI    |
|----------|--------|---------|--------|-------|----------|---------|
| constant | 6.8934 | 13.1474 | .5243  | .6007 | -19.0504 | 32.8372 |
| TOSNfa   | .2826  | .3287   | .8596  | .3911 | -.3661   | .9313   |
| TINNOfa  | .9365  | 1.1754  | .7968  | .4266 | -1.3829  | 3.2559  |
| int_1    | -.0145 | .0295   | -.4917 | .6235 | -.0727   | .0437   |

Product terms key:

int\_1    TINNOfa    X    TOSNfa

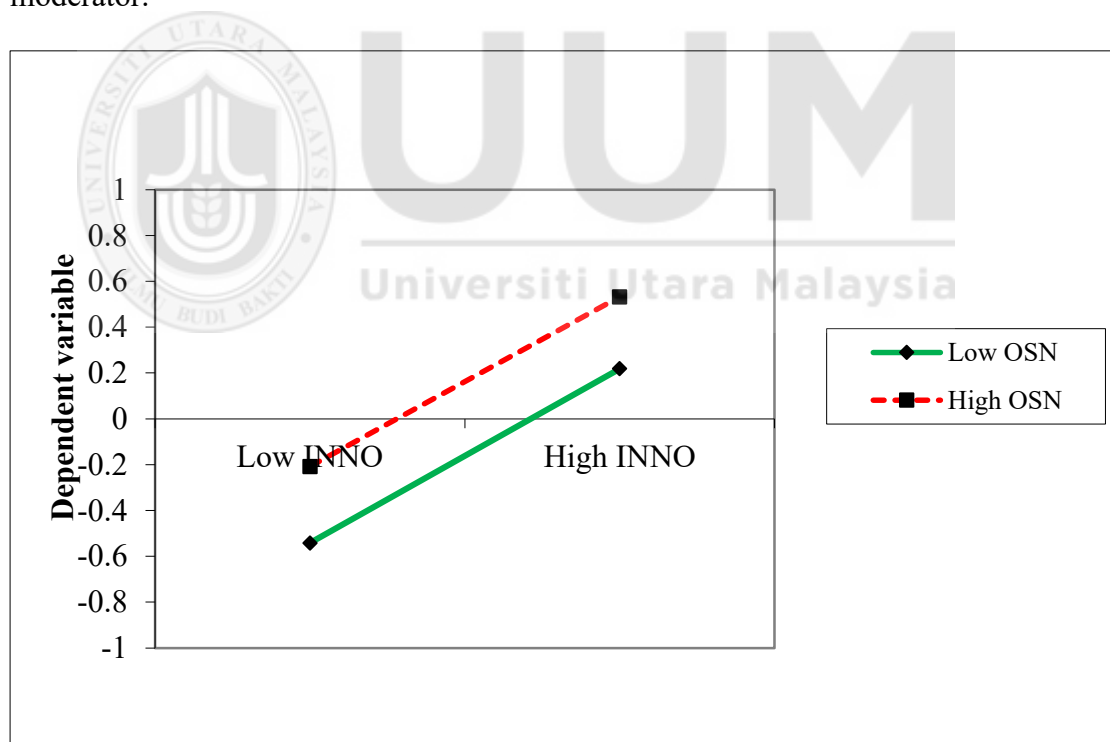
| R-square increase due to interaction(s): |         |       |        |          |       |
|--|---------|-------|--------|----------|-------|
|  | R2-chng | F     | df1    | df2      | p     |
| int_1                                    | .0013   | .2418 | 1.0000 | 179.0000 | .6235 |

*Figure 4.12.* Result of macro-PROCESS of bootstrapping analysis of online social networking in relationship entrepreneurial orientation of innovativeness and nascent venture performance.

Model summary above showed the overall model is significant ( $R = 0.2526$ ,  $R^2 = 0.0638$ ,  $F$  value = 4.0677,  $p > 0.05$ ). the  $R^2$  increased only by 0.0013 due to interaction. However, the  $p$  value for OSN as moderator found to be not significant at ( $\beta = 0.2826$ ,  $t = 0.8596$ ,  $p > 0.01$ ) meanwhile the interaction term also found to be not significant ( $\beta = -0.0145$ ,  $t = -0.4917$ ,  $p > 0.01$ ). In addition, the interaction zero value of lower level

confidence interval (LLCI) and upper level confidence interval (UPCI) fall within this two group (-0.0727, 0.0437), suggesting that the moderator variable is not significant.

In summary, the result from hierarchical regression analysis as presented in table 4.18 and result from macro-PROCESS as shown in figure 4.12 proved that government assistance program did not moderates the relationship between entrepreneurial orientation of innovativeness and nascent venture performance. Therefore, we reject hypothesis 6a. On the other hand, since online social networking was related to nascent venture performance and do not have interaction with riskiness. Thus, from the quadrant underline by Bontis & Serenko, (2007), online social networking was not a moderator.



*Figure 4.13.* Interaction graph of online social networking in entrepreneurial orientation of innovativeness and nascent venture performance relationship.

Figure 4.13 depicts the effect of moderator in a form of graph. Since the moderator variable was not present, the graph did not intercept between ventures which were low



in adopting online social networking and fully adopting online social networking for their ventures. The graph below showed parallel effect where there is no interaction occurs, however, the condition for high INNO is much better than low INNO and main effect was present. This result signifies, ventures which perceived high innovation strategy was actively using online social networking for their business.

#### 4.6.1.3 The moderating effect of online social networking on the relationship between entrepreneurial orientation of proactiveness and nascent venture performance

This section focused on the moderating effect of online social networking on the relationship between entrepreneurial orientation of proactiveness and nascent venture performance. Similar with previous discussion, table 4.19 below reported the findings of government assistance program as a moderator through hierarchical analysis.

Table 4.19

*Result of hierarchical regression analysis for the moderator online social networking on the entrepreneurial orientation of proactiveness-nascent venture performance relationship*

| Independent variable                               | Model 1           | Model 2           | Model 3           |
|--|-------------------|-------------------|-------------------|
| <u>Model variable</u>                              |                   |                   |                   |
| Entrepreneurial bricolage (EB)                     | .108*             | .125*             | .128**            |
| Entrepreneurial Orientation (innovativeness)       | .090              | .104              | .110*             |
| <b>Entrepreneurial Orientation (proactiveness)</b> | <b>.445***</b>    | <b>.429***</b>    | <b>-.408</b>      |
| Entrepreneurial Orientation (riskiness)            | 0.80              | .090              | .091              |
| <u>Moderating variable</u>                         |                   |                   |                   |
| Online social networking (OSN)                     |                   | .148**            | -.432             |
| <u>Interaction terms</u>                           |                   |                   |                   |
| INNO_OS  |                   |                   | 1.054             |
| R  | .518 <sup>a</sup> | .538 <sup>b</sup> | .546 <sup>c</sup> |
| R <sup>2</sup>                                     | .268              | .289              | .298              |
| Adj. R <sup>2</sup>                                | .252              | .269              | .274              |
| Sig. F Change                                      | .000              | .023              | .137              |

Model 1 indicates a good fit of model where 51.8 percent explains all the variability of the response data around its mean. Entrepreneurial bricolage and proactiveness has a

significant effect on nascent venture performance at ( $p > 0.1$  and  $p > 0.01$ ). Significance F change also indicates a significance value of the model. In the model 2, the variable of online social networking (OSN) was included and resulted in an increment at R value at 0.538, in this model also, OSN was found to have significant effect on nascent venture performance at ( $\beta = 0.148$ ,  $p > 0.05$ ).

The final model of model 3 explained the insignificant result of moderated variable after inclusion of interaction term. In the model 3, proactiveness, riskiness and moderator variable found to not have significant effect on nascent venture performance, meanwhile other independent variables, entrepreneurial bricolage and entrepreneurial orientation of innovativeness was significant at ( $\beta = 0.128$ ,  $p > 0.05$ ;  $\beta = 0.110$ ,  $p > 0.1$ ) respectively. Result in model 3 yielded an increment in value of r squared with model where ( $R = 0.546$ ,  $R^2 = 0.298$ ,  $\text{Adj. } R^2 = 0.274$ ,  $F \text{ Change} = 0.137$ ,  $p > 0.1$ ). Although the moderator variable enhanced the model, however significance F change do not have significance effect. Findings indicated online social networking did not moderate the relationship between entrepreneurial orientation of proactiveness and nascent performance of Malay owned venture in Malaysia.

We employed the macro-PROCESS analysis of bootstrapping introduced by Hayes (2012) to see the differences between both results. Using macro-Process by Hayes (2012), dependent variable, independent variable and moderator variable were included in the process, and data was bootstrapped with 1000 and result as shown in Figure 4.14 below.

```

Model Summary
*****
      R      R-sq      MSE      F      df1      df2      p
    .5113    .2614    9.6405   21.1146   3.0000  179.0000   .0000
*****
Model
      coeff      se      t      p      LLCI      ULCI
constant    23.4648    11.7376    1.9991    .0471     .3029    46.6267
TOSNfa      -2.855     .2977    -1.9593   .3387    -1.8729    .3018
TEOPROfa    -1.414     1.0075    -1.4110   .6815    -2.4022    1.5740
int_1       .0323     .0255     1.2659   .2072    -1.0180    .0826

Product terms key:

      int_1      TEOPROfa      X      TOSNfa

R-square increase due to interaction(s):
      R2-chng      |F      df1      df2      p
int_1      .0066      1.6025      1.0000      179.0000      .2072
*****

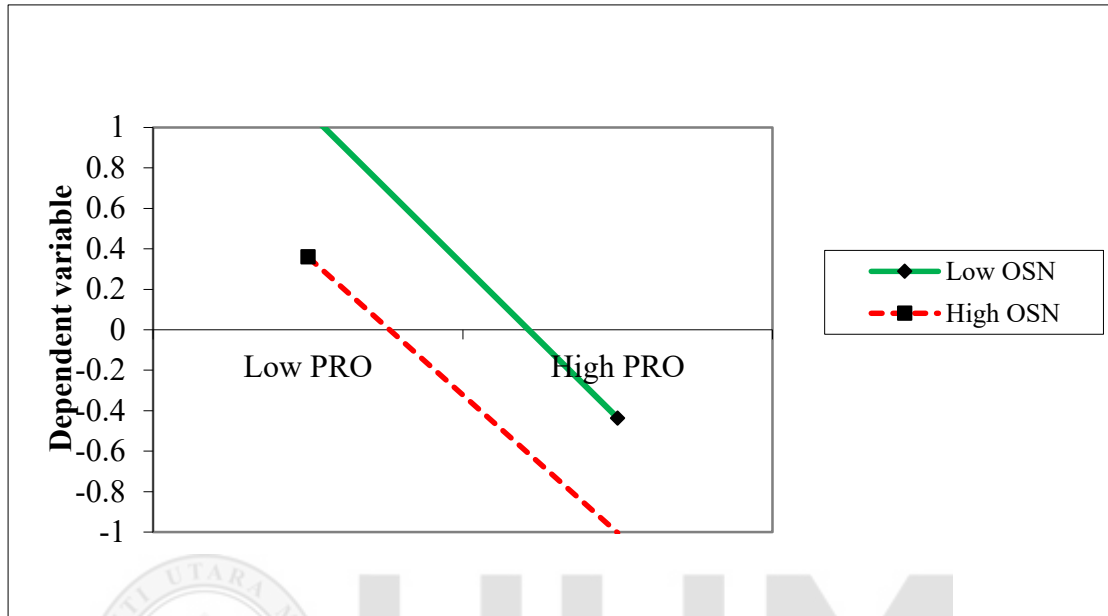
```

*Figure 4.14.* Result of macro-PROCESS of bootstrapping analysis of online social networking in relationship entrepreneurial orientation of proactiveness and nascent venture performance.

Model summary above showed the overall model is significant ( $R = 0.5113$ ,  $R^2 = 0.2614$ ,  $F$  value = 21.1146,  $p > 0.01$ ). the  $R^2$  increased by 0.0066 due to interaction. However, the  $p$  value for OSN as moderator found to be not significant at ( $\beta = -0.2855$ ,  $t = 0.9593$ ,  $p > 0.01$ ) meanwhile the interaction term also found to be not significant ( $\beta = 0.0323$ ,  $t = 1.2659$ ,  $p > 0.01$ ). In addition, the interaction zero value of lower level confidence interval (LLCI) and upper level confidence interval (ULCI) fall within this two group (-0.0180, 0.0826), suggesting that the moderator variable is not significant.

In summary, the result from hierarchical regression analysis as presented in table 4.19 and result from macro-PROCESS as shown in figure 4.14 proved that online social networking did not moderates the relationship between entrepreneurial orientation of proactiveness and nascent venture performance. Therefore, we reject hypothesis 6b. On the other hand, since online social networking was related to nascent venture

performance and do not have interaction with entrepreneurial proactiveness. Thus, from the quadrant underline by Bontis & Serenko, (2007), online social networking was not a moderator.



*Figure 4.15.* Interaction graph of online social networking in entrepreneurial orientation of proactiveness and nascent venture performance relationship.

Figure 4.15 above depicts the effect of moderator in a form of graph. Since the moderator variable was not present, the graph did not intercept between ventures which were low in adopting online social networking and fully adopting online social networking for their ventures. The graph below showed parallel effect where there is no interaction occurs, however, the condition for low PRO is much better than high PRO and main effect was present. This result signifies, ventures which perceived low proactiveness strategy was often in using online social networking for their business.

#### 4.6.1.4 The moderating effect of online social networking on the relationship between entrepreneurial orientation of riskiness and nascent venture performance

This section focused on the moderating effect of government assistance program on the relationship between entrepreneurial orientation of innovativeness and nascent venture performance. Similar with previous discussion, Table 4.20 below reported the findings of government assistance program as a moderator through hierarchical analysis.

Table 4.20

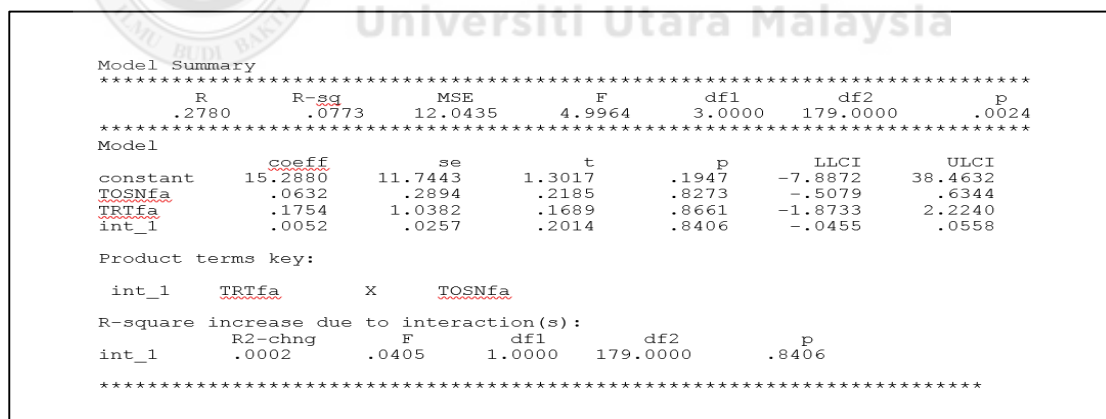
*Result of hierarchical regression analysis for the moderator online social networking on the entrepreneurial orientation of riskiness-nascent venture performance relationship*

| Independent variable                           | Model 1           | Model 2           | Model 3           |
|--|-------------------|-------------------|-------------------|
| <u>Model variable</u>                          |                   |                   |                   |
| Entrepreneurial bricolage (EB)                 | .108*             | .125*             | .130**            |
| Entrepreneurial Orientation (innovativeness)   | .090              | .104              | .104              |
| Entrepreneurial Orientation (proactiveness)    | .445***           | .429***           | .433***           |
| <b>Entrepreneurial Orientation (riskiness)</b> | <b>0.80</b>       | <b>.090</b>       | <b>-.423</b>      |
| <u>Moderating variable</u>                     |                   |                   |                   |
| Online social networking (OSN)                 |                   | .148**            | -.162             |
| <u>Interaction terms</u>                       |                   |                   |                   |
| RT_OSN   |                   |                   | -.586             |
| R  | .518 <sup>a</sup> | .538 <sup>b</sup> | .541 <sup>c</sup> |
| R <sup>2</sup>                                 | .268              | .289              | .292              |
| Adj. R <sup>2</sup>                            | .252              | .269              | .268              |
| Sig. F Change                                  | .000              | .023              | .363              |

Model 1 indicates a good fit of model where 51.8 percent explains all the variability of the response data around its mean. Entrepreneurial bricolage and proactiveness has a significant effect on nascent venture performance at ( $p > 0.1$  and  $p > 0.01$ ). Significance F change also indicates a significance value of the model. In the model 2, the variable of online social networking (OSN) was included and resulted and increment at R value at 0.538, in this model also, OSN was found to have significant effect on nascent venture performance at ( $\beta = 0.148$ ,  $p > 0.05$ ).

The final model of model 3 explained the insignificant result of moderated variable after inclusion of interaction term. In the model 3, only bricolage and proactiveness have significant effect on nascent venture performance, meanwhile other independent variables and moderator variable was not significant. Result in model 3 yielded little increment in value of r squared with model where ( $R = 0.538$ ,  $\text{Adj. } R^2 = 0.268$ ,  $F \text{ Change} = 0.363$ ,  $p > 0.1$ ). Although the moderator variable enhanced the model, however significance  $F$  change do not have significance effect. Findings indicated government assistance program did not moderated the relationship between entrepreneurial orientation of riskiness and nascent performance of malay owned venture in malaysia.

Using macro-Process by Hayes (2012), dependent variable, independent variable and moderator variable were included in the process, and data was bootstrapped with 1000 and result as shown in Figure 4.15 below.



| Model Summary |       |       |         |        |        |          |       |
|---------------|-------|-------|---------|--------|--------|----------|-------|
|               | R     | R-sq  | MSE     | F      | df1    | df2      | p     |
|               | .2780 | .0773 | 12.0435 | 4.9964 | 3.0000 | 179.0000 | .0024 |

| Model    |         |         |        |       |         |         |  |
|----------|---------|---------|--------|-------|---------|---------|--|
|          | coeff   | se      | t      | p     | LLCI    | ULCI    |  |
| constant | 15.2880 | 11.7443 | 1.3017 | .1947 | -7.8872 | 38.4632 |  |
| TOSNfa   | .0632   | .2894   | .2185  | .8273 | -.5079  | .6344   |  |
| TRTfa    | .1754   | 1.0382  | .1689  | .8661 | -1.8733 | 2.2240  |  |
| int_1    | .0052   | .0257   | .2014  | .8406 | -.0455  | .0558   |  |

| Product terms key:                       |         |       |        |          |       |  |  |
|--|---------|-------|--------|----------|-------|--|--|
|  | int_1   | TRTfa | X      | TOSNfa   |       |  |  |
| R-square increase due to interaction(s): |         |       |        |          |       |  |  |
|  | R2-chng | F     | df1    | df2      | p     |  |  |
| int_1                                    | .0002   | .0405 | 1.0000 | 179.0000 | .8406 |  |  |

Figure 4.16. Result of macro-PROCESS of bootstrapping analysis of online social networking in relationship entrepreneurial orientation of riskiness and nascent venture performance.

Model summary above showed the overall model is significant ( $R = 0.2780$ ,  $R^2 = 0.0773$ ,  $F$  value = 4.9964,  $p > 0.05$ ). the  $R^2$  increased only by 0.0002 due to interaction. However, the  $p$  value for OSN as moderator found to be not significant at ( $\beta = 0.0632$ ,

$t = 0.2185, p > 0.01$ ) meanwhile the interaction term also found to be not significant ( $\beta = 0.0052, t = 0.2014, p > 0.01$ ). In addition, the interaction zero value of lower level confidence interval (LLCI) and upper level confidence interval (ULCI) fall within this two group  $(-0.0455, 0.0588)$ , suggesting that the moderator variable is not significant.

In summary, the result from hierarchical regression analysis as presented in table 4.20 and result from macro-PROCESS as shown in figure 4.16 proved that government assistance program did not moderate the relationship between entrepreneurial bricolage and nascent venture performance. Therefore, we reject hypothesis 6c. On the other hand, since online social networking was related to nascent venture performance and do not have interaction with entrepreneurial bricolage. Thus, from the quadrant underline by Bontis & Serenko, (2007), online social networking was not a moderator.

Figure 4.17 below depicts the effect of moderator in a form of graph. Since the moderator variable was not present, the graph did not intercept between ventures which were low in adopting online social networking and fully adopting online social networking for their ventures. The graph below showed parallel effect where there is no interaction occurs, however, the condition for low RT is much better than high RT and main effect was present. This result signifies, ventures which perceived less risk is slightly often in using online social networking for their business.

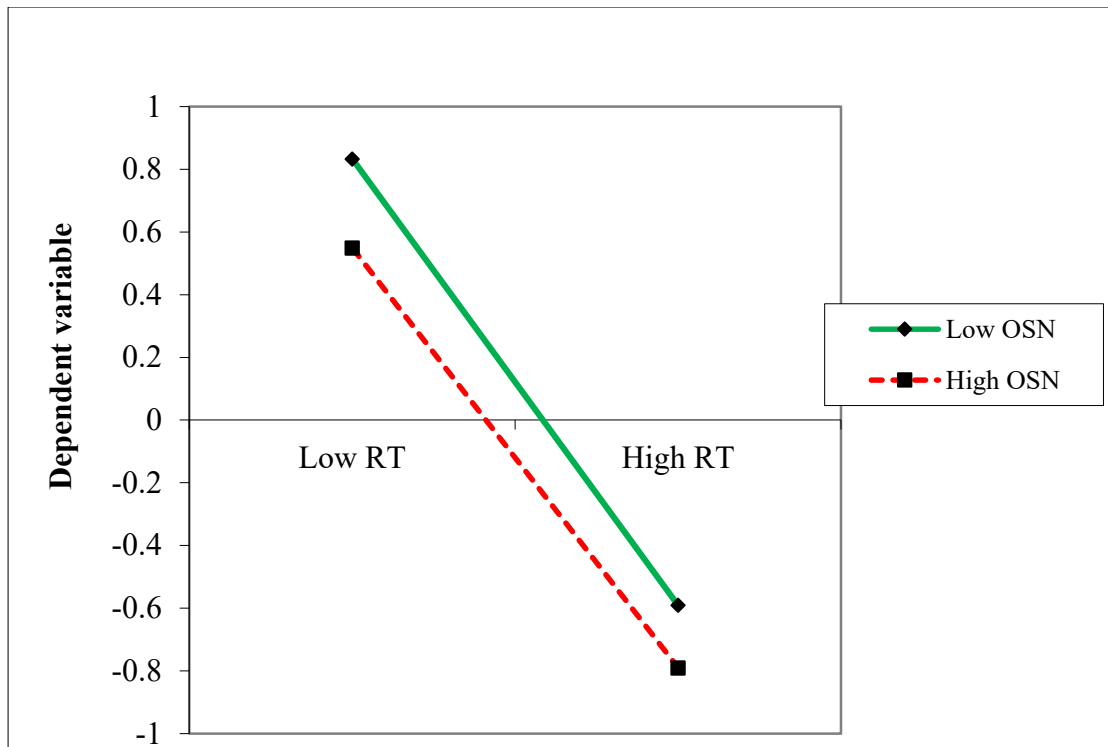


Figure 4.17. Interaction graph of online social networking in entrepreneurial orientation of riskiness and nascent venture performance relationship.

Additionally, after all moderating variables were analyzed through hierarchical regression accordance to Baron nad Kenny (1986) steps of moderation, and macro-PROCESS of bootstrapping analysis by Hayes (2013), findings postulated same result eventhough different in figures value. Table 4.21 below summarized the moderation analysis for this study.

Table 4.21

*Summary of Moderation Relationship*

| Hypothesis   | Statement on Moderation Relationship   | Decision    |
|--------------|--|-------------|
| Hypothesis 3 | Government assistance program moderates the relationship between entrepreneurial bricolage and nascent venture performance                         | Not support |
| Hypothesis 4 | (a) Government assistance program moderates the relationship between entrepreneurial orientation (innovativeness) and nascent venture performance. | Not support |



|              |  |             |
|--------------|--|-------------|
|              | (b) Government assistance program moderates the relationship between entrepreneurial orientation (proactiveness) and nascent venture performance.      | support     |
|              | (c) Government assistance program moderates the relationship between entrepreneurial orientation (risk taking) and nascent venture performance.        | Not support |
| Hypothesis 5 | Online social networking adoption moderates the relationship between entrepreneurial bricolage and nascent venture performance.                        | Not support |
| Hypothesis 6 | (a) Online social networking adoption moderates the relationship between entrepreneurial orientation (innovativeness) and nascent venture performance. | Not support |
|              | (b) Online social networking adoption moderates the relationship between entrepreneurial orientation (proactiveness) and nascent venture performance.  | Not support |
|              | (c) Online social networking adoption moderates the relationship between entrepreneurial orientation (risk taking) and nascent venture performance.    | Not support |

## 4.7 Chapter Summary

This study tested 12 hypotheses including four direct effect hypotheses and eight moderating hypotheses. A summary of the results of hypotheses testing is shown in Table 4.22.

Table 4.22

*Summary of the results of hypotheses testing*

| <b>Hypothesis</b>   | <b>Result</b> |
|---|---------------|
| H1: The venture strategy of entrepreneurial bricolage has a significant relationship on nascent venture performance.                                    | Accept        |
| H2a: The venture strategy of entrepreneurial orientation (innovativeness) will positively influence the nascent venture performance.                    | Reject        |
| H2b: The venture strategy of entrepreneurial orientation (proactiveness) will positively influence the nascent venture performance.                     | Accept        |
| H2c: The venture strategy of entrepreneurial orientation (risk taking) will positively influence the nascent venture performance.                       | Reject        |
| H3: Government assistance program moderates the relationship between entrepreneurial bricolage and nascent venture performance.                         | Reject        |
| H4a: Government assistance program moderates the relationship between entrepreneurial orientation (innovativeness) and nascent venture performance.     | Reject        |
| H4b: Government assistance program moderates the relationship between entrepreneurial orientation (proactiveness) and nascent venture performance.      | Accept        |
| H4c: Government assistance program moderates the relationship between entrepreneurial orientation (risk taking) and nascent venture performance.        | Reject        |
| H5: Online social networking adoption moderates the relationship between entrepreneurial bricolage and nascent venture performance.                     | Reject        |
| H6a: Online social networking adoption moderates the relationship between entrepreneurial orientation (innovativeness) and nascent venture performance. | Reject        |
| H6b: Online social networking adoption moderates the relationship between entrepreneurial orientation (proactiveness) and nascent venture performance.  | Reject        |
| H6c: Online social networking adoption moderates the relationship between entrepreneurial orientation (risk taking) and nascent venture performance.    | Reject        |

## **CHAPTER 5**

### **CONCLUSION AND RECOMMENDATIONS**

#### **5.0 Introduction**

This final chapter of the thesis focuses on the discussion of findings, conclusions, and recommendations based on the results of the study. The first part of the chapter presents discussion of findings aligned with research objectives and research objectives and research questions. Next, brief recapitulation of findings is presented. Then it describes the contributions made in terms of theoretical, methodological and practical perspectives. The chapter also presents a discussion on practical, theoretical and policy implications made by the study. Finally, it discusses limitations of the study and suggestions for future research.

The first part of this chapter discussed the findings of analyses specified in chapter 4, and these findings answered all three research questions outlined in chapter 1. The 12 hypotheses, only three which were accepted, indicated further study is needed to recapitulated best model for nascent venture strategy in Malaysia business model.

- 1) To examine the relationship between entrepreneurial bricolage with performance of nascent venture in Malaysia.
- 2) To examine the relationship between entrepreneurial orientation with performance of nascent venture in Malaysia.
- 3) To evaluate the moderating effect of government assistance programs on the relationship between entrepreneurial bricolage and performance of nascent venture in Malaysia.

- 4) To evaluate the moderating effect of government assistance programs on the relationship between entrepreneurial orientation and performance of nascent venture in Malaysia.
- 5) To evaluate the moderating effect of online social networking adoption on the relationship between entrepreneurial bricolage and performance of nascent venture in Malaysia.
- 6) To evaluate the moderating effect of online social networking adoption on the relationship between entrepreneurial orientation and performance of nascent venture in Malaysia.

## **5.1 Recapitulation of findings**

This section is reporting on the explicit findings extracted from the correlation analysis and hierarchical multiple regression analysis according to the objectives of this study. These findings are discussed in the following sections.

### **5.1.1 Entrepreneurial bricolage with performance of malay-owned nascent venture in Malaysia.**

The construct of entrepreneurial bricolage is derived from the work of Baker and Nelson (2005) and adopted the construct items from Senyard, et al. (2009). Although current literature by Davidsson, et al. (2017) and Senyard, et al. (2014) had introduced the proper measure for bricolage, yet the principle of construct is taken from previous literature and underlies from the work of Baker and Nelson (2005) of resources at hand, combination of resources and making do. In addition, their study also postulate similar context of unidimension construct, but in better version as the measure is developing

sufficiently to validate quantitative measures for theory testing. From the previous literature, the relationship between bricolage and performance was less found in quantitative studies (Baker & Nelson, 2005; Senyard, et al., 2011; Salunke, et al., 2013) as discussed in the literature reviewed and development hypothesis. In fulfilling research objective 1, the correlation analysis and multiple regression were employed.

The previous finding of correlation analysis portrays entrepreneurial bricolage was positively related with nascent venture performance. Meanwhile multiple regression were analyzed and found out that entrepreneurial bricolage has significant effect towards nascent venture performance. This finding consistent with previous work of Senyard, et al., (2009). Thus, we accepted hypothesis 3. In Senyard, et al. (2009) work, they found out that bricolage has a positive effect on performance in the emerging stage of firm creation.

In general, this result is supporting the general model of entrepreneurial success by Gielnik and Frese (2013). The model has pointed out the entrepreneurial strategy of bricolage has significantly affected the entrepreneurial success in developing country. Theoretical thrust of prior behavior theory and model about bricolage as discussed in previous chapter of literature review, which we believed that most nascent ventures are resource constrained. In important ways to form a survival strategy, adapting resourceful behaviors through bricolage are likely to be play a key role in shaping their ventures performance better. Importantly, our results support the previous studies of bricolage in nascent context. The challenges of being a resourceful constraint ventures drives them to formulate creative strategy and creates more opportunities for their

survival. Thus, we adhere the importance of bricolage strategy for nascent ventures shaping their growth and performance.

### **5.1.2 Entrepreneurial orientation (innovativeness, proactiveness, riskiness) with performance of nascent venture in Malaysia.**

Entrepreneurial orientation has been extensively studied by past entrepreneurship research, from start-up phase till growth phase, previous studies adopted entrepreneurial orientation as a strategic decision making (Lumpkin & Dess, 2001; Lan & Wu, 2010). The implication of entrepreneurial orientation towards business performance contributed to better enhancement and growth (Miller, 1987; Lumpkin & Dess, 1996). Debating issue on dimensions of entrepreneurial orientation in entrepreneurship studies also lead to future research extension of EO (Fairoz, et al., 2010; Hult, et al., 2003; Lee, et al., 2001; Wiklund & Shepherd 2003). This research used innovativeness, proactiveness, riskiness as the dimension of EO.

The previous finding of correlation analysis portrays entrepreneurial orientation of innovativeness, proactiveness and riskiness were positively related with nascent venture performance. Meanwhile multiple regression were analyzed and found out that only proactiveness has significant effect towards nascent venture performance. This finding consistent with previous work of (Kraus, Rigtering, Huges and Hosman, 2012). Thus, we accepted hypothesis 4b. In Kraus, et al. (2012) study, they found that only proactiveness is significantly affect the performance of 164 Dutch SMEs. Their finding postulated Entrepreneurs tend to be more proactive in seeking alternatives to boost up their firm performance in economic recession. Although the dimension of EO; innovativeness, proactiveness and riskiness has been studied in most entrepreneurship

research and produce significant effect on business performance (Miller, 1983; Justin, et al., 2010; Jajali, et al., 2014; James, et al., 2015; Deniz, 2016). However, the studies done by (Begley & Boyd, 1987; Lumpkin & Dess, 1997; Lumpkin & Dess, 2001; Lindsay, 2003) found inconsistent findings of EO.

Proactiveness found to be significant with nascent venture performance in this study. This finding consistent with study of Miller (1983); Lumpkin and Dess (1997; 2001) which were positively significant with profitability and sales growth, meanwhile the findings of Lindsay (2003) posited negatively significant with profitability. Lumpkin and Dess (2001) found that proactiveness has the most impact on firm performance in companies that operate in industries that are in early stages of their development. Furthermore, also Hughes and Morgan (2007) found a positive proactiveness-performance relationship in the high technology industry that can be in early stages of its development in the sense that the changes are rapid, and the development is fast. These findings supported proactiveness may be one of the explaining factors of an early stage industry to grow and survive. In similar vein, proactiveness found to be significant in this study which was concerned at the nascent ventures in Malaysia.

Proactive ventures are in a better position to exploit existing opportunities by scanning their environment for useful information that they can utilize to satisfy underserved markets. Furthermore, for the firm to take a leadership position within the industry there need to have a proactive behaviour (Lumpkin and Dess 2001). Thus, proactive ventures are also able to create new opportunities for themselves by actively seeking to redefine their market; successful organisations in this vein benefits from increased levels of demand, higher levels of customer loyalty, and greater profitability (Covin and Miles

1999). Therefore, based on the reviewed of the above literature we can depict the sequence of positive and significant relationship between proactiveness and nascent venture performance in Malaysia.

On the other hand, innovativeness and riskiness found to be insignificant with nascent venture performance. Despite of contradict findings of typical EO-performance significant linked relationship, this is not the first study to demonstrate a non-significant relationship between EO of innovativeness and risk taking of young-firm performance (Massersmith & Wales, 2011; Hughes and Morgan, 2007; Stam and Elfring, 2008; Walter et al., 2006). Innovation is a complex phenomenon that involves the production, diffusion and translation of knowledge in new or modified products or services, or the development of new production or processing techniques (Bigliardi, 2013). It reflects a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes (Lumpkin and Dess 1996).

According to Lumpkin and Dess (1996) and Bigliardi (2013), innovation is an important component of a firm's strategy mainly because it constitutes one of the principal means through which it can seek new business opportunities. A firm's construction of sustainable competitive advantage crucially depends on its capacity to innovate (Marques and Ferreira, 2009). However, tangled with the liability of newness, it was rigid for ventures to anticipate with innovativeness. Innovation is considered by many researchers and managers to be critical for firms to compete efficiently in both domestic and global markets (Hitt, 2001). Indeed, it facilitates the development of new organizational routines and the discovery of unique approaches to technologies,



products, or processes and enables SMEs to adapt to changing market conditions through the introduction of new and refined products (McGrath, 2001; Ireland et al 2009). It is obvious with the constraint capacity to grow because of scarced of capacity, nascent venture merely difficult to be innovative, however it's still possible. Moreover, Koellinger, (2008) found that innovative activity is not necessarily associated with higher profitability.

Risk taking is the willingness to absorb uncertainty and take the burden of responsibility for the future (Chen, et-al., 2007). It is one of the three essential elements of EO, and one that enhances company profitability (Miller, 1983; Miller and Le Bruton-Miller, 2011). It is the degree to which managers are willing to make large and risky resource commitments and act in an uncertain environment (Miller 1983). It was expected that firms that have better performance would also have a higher level of risk propensity (Leko-Simi and Horvat, 2006). According to risk-returned theory, asserts that the higher the risk, the higher the return. Return is one of the factors for measuring performance. It is imperative to understand at this point that every business endeavours must involved some degree of risk.

Different with the study conducted by Kraiser et-al, (2013) examined the relationship between each component of EO, innovation, proactiveness and risk-taking; they found that risk-taking and Muhammad et. Al, (2014) also confirmed that risk-taking has positive and significant relationship with financial performance. However, this study performance consistent with Wijetunge and Pushpakumari (2013), where in their research found that risk-taking are positively related to performance, but the level of the relationship is not significant. In the meta-analysis covering 60 studies Zhao et al.

(2010) do not find evidence of a significant impact of risk propensity on performance. Thapa (2015) studies the role of risk propensity on microenterprise performance in Nepal and finds no effect. Hormiga and Bolivar-Cruz (2014) show that among immigrants in Spain, the perception of risk influences the decision to become an entrepreneur. Robinson and Marino (2013) argue that overconfidence can deteriorate firm performance. Similarly, Lim (2008) risk-taking has the lowest positive influence on performance. Thus, this explained Malaysian nascent ventures were risk averse in doing business. The findings also signal, that as suggested by Lumpkin and Dess (1996), in the early developmental phases of firms, not all EO dimensions are equally or necessarily associated with business performance.

### **5.1.3 Moderating effect of government assistance program on entrepreneurial strategy (EB and dimensions of EO) with performance of nascent venture in Malaysia.**

Government assistance programs were known as an effective variable in helping entrepreneurs dealing with the business challenges especially for nascent and new firms. Government assistance programs are formed through the collaboration of government with non-profit organization (NGO) or other private institutions to assist the small business entrepreneurs especially those who are in nascent stage on their business development. There were few research studies on the role of government assistance programs (GAP) for entrepreneurs, however the effectiveness of GAP is absent in relation to nascent business strategy (Gomezeli & Kusce, 2013; Belso-Martinez, Molina-Morales & Mas-Verdu, 2011; Zainol & Daud, 2011; Yusof, 2010). Thus, there is a need to study the moderator role of government assistance program in enhancing venture's performance. In answering research objectives 3 and 4, the hypotheses 3, 4a, 4b and 4c.

Hierarchical regression and macro-PROCESS of bootstrapping were employed to examine the moderating effect on the relationship between entrepreneurial strategies (bricolage, entrepreneurial orientation of innovativeness, proactiveness and riskiness) with nascent venture performance. Findings postulated government assistance programs only moderated the relationship between proactiveness and nascent venture performance. Although the results contradict with previous studies (Gielnick & Frese, 2013; Lumpkin & Dess, 1996; Shariff et al., 2008; Abdullah & Hussin, 2010), this finding consistent with the study done by (Moeljadi, et al., 2015; Soares, et al., 2014; Munoz, et al., 2014). Finding from analysis also showed that Malaysian entrepreneurs especially start-up are proactive in doing business especially finding business opportunities and resources. However, more proactive the ventures, the less dependency on the government. Klassen & Whybark (1999) claimed that depending on the government's influence, ventures will undertake a more or less proactive or reactive strategy. Proactive firms are those who are willing to take actions and go beyond the law and reactive firms are characterized by just keeping up with the regulations.

Government assistance program also did not moderate the relationship between bricolage, innovativeness, riskiness and nascent venture performance. Despite of the benefits and advantages of the program, the role of government assistance programs for malay owned nascent ventures is impractical. Bricolage can be understood by a connection to the processes of creativity and improvisation (Baker et al. (2003). For example, bricoleurs have been described as tinkerers searching for new, unexpected cultural resources (Miettinen & Virkkunen, 2005). While entrepreneurs of nascent ventures engaged with the bricolage strategy, their focused more on finding solutions for their resources challenge. Meanwhile, government assistance programs in Malaysia

happened to assist and promoting entrepreneurship for entrepreneurs by provided training and assistance in doing business. (Ramayah & Harun, 2005). In different views, Julian and Ahmed (2009) believed level of creativity of Malaysian's entrepreneurs is blocked with the small opportunity to access market opportunities. Thus, they acknowledged that nascent ventures unable to produce original designs. Instead, they tend to copy foreign designs due to the fact that they do not have the expertise to design their own products. Chee (1984) stated that small and medium-sized firms in Malaysia lacked knowledge on foreign market opportunities. Small firms also complained of unfair competition from their large-scale rivals. Unfair competition may arise from certain government policies, which tended to favour large firms when awarding contracts from overseas firms than to the small and medium-sized firms.

Understanding the nature of new firms especially in Malaysia setting, being innovative firms is far from expectation. Favourable government policy is also one of the issues essential to the Malaysian SMEs' innovation. However, the lack of favourable government policy hinders the Malaysian SMEs innovation achievement. As such, about 47.0 percent strongly agreed that Malaysian SMEs have not received sufficient support to innovate new products (Nor, Bhuiyan, Said & Alam, 2016). In addition, findings of demographic of resources acquisition also postulates on 7 percent undergo technical assistance program and 64.5 percent depends on soft loan while only 0.6 percent uptakes in sponsorship and grant. The unfavourable of this type assistance not only happened because entrepreneurs are not innovative in their business idea, also it shows that our entrepreneurs are risk averse to invest to have better business proposal in applying sponsorship and grant. Thus, at the end they will go for soft loans which is sometimes have high interest rate in funding their business.

#### **5.1.4 Moderating effect of online social networking on entrepreneurial strategy (EB and dimensions of EO) with performance of nascent venture in Malaysia.**

Social networking sites utilization in business is a current and popular research topic. Although there do exist studies and information about how companies currently use social media, knowledge about social networking use in entrepreneurial activity is relatively scarce, both the theoretical and empirical research is quite fragmented. Furthermore, it is not well known how companies see the potential benefits of using online social networking in enhancing innovation efforts and customer involvement. Tuanmat and Smith (2011) claimed that most entrepreneurs always strive to alleviate the ventures with the changes of technology and inadequate internal and external resources of the firm. They further argued, there is limited research on how changes in technological and competitive work environments cause strategic change in SMEs and how these changes affect the business performance. In answering research objectives 5 and 6, the hypotheses 5, 6a, 6b and 6c.

Hierarchical regression and macro-PROCESS of bootstrapping were employed to examine the moderating effect on the relationship between entrepreneurial strategies (bricolage, entrepreneurial orientation of innovativeness, proactiveness and riskiness) with nascent venture performance. Findings postulated online social networking did not moderated all the relationship of entrepreneurial strategies and nascent venture performance. Although previous studies consistently support the role of online social networking enhanced the relationship between strategy and performance (Gielnick & Frese, 2013; Lumpkin & Dess, 1996; Kiprotich, et al., 2015; Manev, et al., 2012; Acquaaah, 2011). Surprisingly, in our context of study the moderator role of online social networking is insignificant. Although contradicting with the previous studies, it

was found that social networking did not moderated the relationship between innovativeness and performance (Kiprotich, et al., 2015). Also, in study of Acquaaah (2011), social networking was found to moderate the relationship between firm strategy and capability in terms of business family only. While the moderator role was insignificant for business in government and community linked networking.

Our findings signify that malay owned nascent ventures do not grasp the use of this technology for business. This support the evidence of low uptakes and underutilized of technology for business. Although the online social networking is significantly contributed to nascent venture performance, but it not enhances the relationship between entrepreneurial strategy and performance. Bricolage concept has acknowledged creativity and bridging opportunities in reducing resources scarcity of the business. As this strategy is significantly improves nascent ventures performance, the usage of online social networking is being neglected because of underutilization of technology usage. From findings of resources acquaition profile, it shows that malay entrepreneurs of nascent ventures in Malaysia only utilized online social networking for selling and promotion purposes. Thus, bricolage strategy is limited, and the technology usage is neglected. In fact, online social networking also did not enhance the relationship between entrepreneurial orientation dimensions and nascent venture performance. Since online social networking only as a marketing tools for entrepreneurs, thus it would not improve the strategy-performance linked.

## **5.2 Contribution of the study**

This study looks at exploitation and exploration of nascent venture entrepreneurial strategy in acquiring their resources. This research explains on the innovativeness, proactiveness, riskiness and bricolage as different types of entrepreneurial strategy has contributed to the understanding on the effects of these strategy either directly or indirectly through the moderating effect of resource acquisition on nascent venture performance. In addition, this study attempts to expand the boundary of the current literature as it investigated the moderating effect of the government assistance program (GAP) and online social networking (OSN) as the variables of resources acquisition in this study. By integrating the entrepreneurial orientation, bricolage strategy, and resources acquisition of GAP and OSN perspective, the present study can claim significant relevant contributions to the literature besides forwarding pragmatic suggestions for the considerations of the policy makers as well. The essence of the contributions of this study is presented in the following sub-sections.

### **5.2.1 Theoretical contribution**

First theoretical contribution in this study is the verification of empirical evidence in line with the theoretical relationship as addressed in research framework. The metaphor of life cycle theory has been widely used by previous researchers to explain the development of one's business status. In early stage of business lifecycle theory, the emergence stage is the most critical phase for nascent venture survived in the business market. As previous studies highlight the high of failure rate for the startup company (Rahman, et al., 2016; Husin & Ibrahim, 2013; Jamak, et al., 2012), this research extends the literature on the emergence phase of business venture. In addition, this research

verified to the real activities of nascent ventures within five years (emergence stage) of their operating.

In the emergence phase, the discussion of OLC theory by Lester, Parnell & Carraher (2003) focused on viability, or simply identifying enough customers to support the existence of the ventures. Decision-making and ownership are in the hands of one, or a few, and the environment is unanalyzable (Daft & Weick, 1984). Business in this stage tend to enact or create (Bedeian, 1990) their own environments. The profile of Malaysian nascent ventures supported the emergence stage of OLC theory. In addition, Robbin and Barnwell (2006) also highlight that in this stage, ventures tend to be more creative to reduce their risk of resources scarcity. Our findings also supported the previous findings where the concept of bricolage has been acknowledged as a creative solution in managing their business. Thus, regardless of five years of operating, nascent ventures in Malaysia were considered weak but progressing within their own business environment.

The second theoretical contribution is our research contributes to contemporary debates on RBV theory. In particular, we contribute to the interplay government assistance program and online social networking as nascent ventures platform in acquiring resources to build capabilities suggested by Maritan and Peteraf (2011). To the best of our knowledge, these two types of resources have rarely studied together in the current entrepreneurship literature as a firm resource.

Third theoretical contribution, this study offers an insight of the relationship between nascent ventures' strategies (entrepreneurial bricolage and entrepreneurial orientation)



with nascent venture performance. While the relationship between entrepreneurial orientation and performance has been extensively discussed in the previous literature (Lumpkin & Dess, 1996; Miller 1983; Dimitratos, Lioukas, & Carter, 2004; Lumpkin & Dess, 2001; Zahra, 1991; Rauch, et al., 2009), this study concerned at the strategy making processes that provide nascent ventures with a basis for entrepreneurial decisions and actions. Even though nascent ventures should focus on resource scavenging and developing resource troves, they also need to be concurrently developing strong resource recombinative capabilities for bricolage so that solutions developed via bricolage behaviours may extend beyond just “good enough”, enabling stronger firm performance. Thus, bricolage theory is another important factor in determining the performance of nascent ventures and young firm.

Fourth contribution is, by linking external strategic resources as suggested by Maritan and Peteraf (2011), our research taps this opportunity and studies the role of acquiring financial resources (e.g. government loans) in the process of building different types of competitive advantages (e.g. innovation, licensing-in, marketing and human capital). In addition to answering whether acquiring resources impacts nascent ventures, we disentangle how specific government financial support may help build innovation, licensing-in, marketing and human capital advantages.

### **5.2.2 Practical contribution**

The core objective of conducting this study is to present outcomes which might be beneficial to and practical for nascent venture. Consequently, the present study is also useful to the Malaysian government and its agencies (e.g., SME Corp.), business

practitioners, as well as business and academic researchers in furthering our understanding on how resources acquisition of this model enhances performance of malay- owned nascent venture. In addition, using the findings of the present study, both government and owner-managers would be able to identify which of the aforementioned resources are relevant to their performance based on the empirical evidence.

Firstly, the findings of this study would be useful to the policy makers and practitioners especially in designing the future development of entrepreneurship programs for the current and future entrepreneurs in Malaysia, taking into account the survival rate among nascent considered worrying ( Husin & Ibrahim, 2013; Rahman, et al., 2016), and further support the government's ability and efficiency in assisting nascent and developing firms (Teoh & Chong, 2007).

Secondly, it is also hoped that the outcomes of this study will help to fill the gap in the understanding of the concept of bricolage and EO of Malaysian business leaders, particularly in the context of nascent ventures or emerging firms. The study concludes that the malay owner of nascent ventures in Malaysia are practising and displaying bricolage and proactiveness of EO. These two variables were empirically tested and showed significant positive effects on business performance. Thus, owner-managers are encouraged to further develop their understanding further of bricolage and EO especially innovativeness and riskiness where our entrepreneurs were lack behind compared western entrepreneurs. Personal initiatives to learn and develop skills and knowledge in regard to these variables may benefit them and their firms, supported by the entrepreneurship education, training and development programs for entrepreneurs by SME Corp. Malaysia, the governing body that oversees entrepreneurial development

in Malaysia. The training should focus on developing and nurturing the bricolage and EO, as well as the importance of government assistance and technology usage for their business.

Thirdly, to strengthen their strategy. Continuing support and assistance from the government and financial institutions would help these enterprises to fully engage in management, innovation and other proactive activities and thus allow them to venture into risky territory with a high potential for profits. Thus, government bodies should relook and reevaluate their assistance program so that it will benefiting new entrepreneurs especially nascent entrepreneurs in rural areas.

Fourthly, programs like SUPERB, MAGIC are among the current initiatives programs to encourage entrepreneurs successfully managed their business ventures. However, support facilities should be provided at the individual level, and not be fragmented. This means a more focused approach that meets the needs of new entrepreneurs is necessary. Thus, a central coordinating body that will manage the effort and create an overall master development will be useful. In addition, given that Malaysia is a multicultural and multiethnic country, the existing agencies may find it challenging to reach out to all intended targets. Personalized entrepreneurial training for each of the intended target groups must be developed. For instance, tools and technique for training the Malay in rural areas to become good entrepreneurs may not be the same as urban start-up owners, as most of rural entrepreneurs may lack in term of current infrastructure and technologies. More importantly, there is no such thing as the pressure to make profit for the them who willingly accept the results of their businesses regardless of the level of success (Jamak et al. 2010). Furthermore, many do not know the practice of negotiating or haggling for prices with potential customers (Jamak et al. 2010).

Therefore, cultural differences need to be taken into consideration with training programs. As such, attention should also be paid to entrepreneurial efforts of each target group including those in the rural and remote areas. Lastly, given the limited studies on microenterprises, further research and collaboration between academics and the government should also be encouraged so that more microenterprises will continue to flourish. This includes funding for studies and research that may determine program offerings that better impact the success and the survival rate of nascent ventures.

The final practical implication of this study pertains to the relevance of technology usage like online social networking sites for businesses. While the benefit of social networking site proven to helps nascent ventures performance, the low uptakes of usage by entrepreneurs hindered the business growing bigger. Most of Malaysian entrepreneurs actively used facebook and Instagram for their business purposes. However, the usage only for marketing purposes. There is a lot of room for entrepreneurs used this technology for business like increased their networking between suppliers and customer, do market analysis and knowledge sharing from the business experts. Thus, entrepreneurs itself must have personal initiatives in learning how to utilize the technology well.

To summarise, this study makes concrete contributions by providing an empirical framework and findings for understanding entrepreneurial behaviour in the context of nascent venture in Malaysia. The integration of bricolage, EO and resources acquisition of government assistance and social networking are found to provide positive increases in organisational outcomes. These clearly proved results may help these organisations to focus on what really matters to improve their performance.

## **5.4 Limitations and Recommendations for Future Research**

Despite the enormous contributions given by this study theoretically, as well as practically, as in many investigative studies, several limitations must be taken into cognizance. However, despite of their limitations, the findings of this study are believed to indicate directions for further research.

### **5.4.1 Limitations**

The research pertaining to business and economic studies are usually encountered with many limitations for the apparent reasons and the present study is no exception to the phenomenon. Overall, this study has achieved the objectives and demonstrated the appropriate entrepreneurial strategies to be deployed by nascent venture in enhancing their ventures' performance, within the availability of resources as nascent venture needed most in strengthening their development process. Even though the contributions of this study were significant, it was also constrained in several ways.

First, this study was constrained by limited amount of time and money for data collection. Even though more than 100 samples were received during five months period of actual data collection, further efforts to increase the response rate were limited by the availability of time and money. In addition, the constraints in data collection also happened due to the changed address of the ventures as its notifies as undelivered mail and limited cooperation from respondents, that was caused by various factors, such as ventures' policy of not leaking the information, and/or simply because of respondent

being uninterested in completing the survey (see Table 4.12 for details).

The second limitation lies on the nature of the study that have been applied in a cross-sectional manner, indicating that the perceptions regarding the variables of entrepreneurial bricolage, entrepreneurial orientation, government assistance program, online social networking and nascent venture performance among Malay are collected at a single point in time and conditions and influences can change over time. This is to say, cross-sectional study only provides a snapshot view of the researched phenomena where data on all measures were collected at the same time. In addition, based on Sekaran and Bougie (2010), one of the limitations of cross-sectional study is the restriction to prove the cause-effect relationship amongst the variables. Hence, the conclusions themselves must be treated as correlational rather than casual.

Third limitation for this study happens during and after the analysis of data can be caused by the various reasons. Since this study was using parametric methods that need to meet some required assumptions such as outliers. However, it is quite impossible to remove all outliers from the analyses. As such, even though outliers in the univariate, bivariate, and multivariate analyses have been dealt with, some of them were still exist. Consequently, as normality is achieved after removal of outliers, it is however approximately normal. Meanwhile, the sample size for this study was just slightly above the minimum acceptable number of samples to perform analyses. As for comparisons, previous study on nascent venture performance especially western researchers can reached larger samples for analysed ranged between 146 to 595 (Semrau, et al., 2012; Honig & Samuelsson, 2011; Garonne, et al., 2013; Sigmund et al., 2015). Meanwhile the sample size for this study is 183 which is at minimum but within an acceptable limit. In other words, even though all of the assumptions were

achieved, as they are not perfectly met, the power of analyses may be affected and the results might have limited generalisability especially when the “information from a random sample is not always an accurate reflection of the population from which the sample is drawn” (Argyrous, 2011, p. 295).

Fourth limitation of this study is adopting subjective measures that are similar to the drawback of the single-informant that might encourage performance evaluation bias. Otherwise, subjective measure also depends on the owner-managers’ temporary state of mind or feeling at the time they responded to the questionnaire which is not very suitable if the study intends to evaluate on the financial performance of the firm.

Fifth limitation explained as although contingency theory was used as underpinning theory of this study, the contingent factor of environment was neglected because most of the previous studies focused on the environment factors as contingent factors of new firms’ performance (Aziz, 2010; Lumpkin & Dess, 2001; Wiklund & Shepherd, 2005; Covin, Green & Slevin, 2006; Cruz & Nordqvist, 2012). Although this study highlighted the gap by focusing on resources factors as contingent factors, the findings of study postulates there was a weak moderator role of firms resources in this study. Therefore, the inclusiveness of environment factor in the study may produced different results. In addition, Korunka, et al., (2010) debated the contingency theory is not the best theory to explain the fit between contingent factors especially in examining a new firm performance.

Final limitation of this study lies within the small population of the study. Since the study controlled the uniqueness of nascent ventures by limiting the age of operating within five years and only malay owned nascent ventures were selected for the study,

this population is considered small compared to the establishment of the company each year. For example, in 2017, current establishment of business until Jun already reached 191,000 businesses. However, this number includes partnership, franchised, branches, local businesses, foreign business and other races like Chinese, Indian, and non-bumiputera. Our population is small compared the real number of establishments as reported in the Census of Establishments and Enterprises by the Department of Statistics Malaysia (DOSM, 2017). Therefore, the response rate received was also very low with a small portion of respondents from East Malaysia (Sabah, Sarawak, and Labuan) and also other races (Chinese, Indian, and other races). Hence, this fact coupled with the small-sample size limits the generalizability of the findings.

#### **5.4.2 Recommendation for future research**

The findings of this study provide several opportunities for future research. It is hoped that despite their limitations, the findings of this study will indicate directions for further research.

The responded rate considered low when using online survey in distributed questionnaires, this method is questioned. Although 25percent to 40percent is considered normal rate in SMEs setting in Malaysia (Mok & Wafa, 2007; Kheng, 2012; Zainol & Daud, 2011), using different method is adequate to increase the rate of responded return. Self administered method is the most reliable to have high response rate. According to Bryman and Bell (2003) self-administered questionnaires are useful as they cover wider geographical area, offer convenience to respondents, keep identity of respondents undisclosed, and contain well structured questions.



In relation to the second limitation in this study that concerns with its cross-sectional nature in which data were collected over a single period of time from a number of malay-owned nascent ventures in Malaysia, the use of longitudinal data would provide a remedy for this constraint. In addition, caution should be exercised when drawing causal inferences and by employing longitudinal data, independent variables and dependent variables are measured at two or more points in time, to compare and contrast with the present study's findings and be able to draw cause-effect interference appropriately. Furthermore, previous studies on nascent venture especially from western researcher adopted longitudinal study as the emergence stage requires nascent activities from early for researchers observed their development (Semrau, et al., 2012; Honig & Samuelsson, 2011; Garonne, et al., 2013; Sigmund et al., 2015).

Meanwhile, third suggestion for this study is to combine the qualitative approach to support quantitative results. Qualitative research makes it easy for researcher to gain clearer understanding about the target respondent since the types of questions asked during the process starts with "Why". This is more powerful method and easy to deal with than those questions that focus on what, when and how much. With clearer understanding, researchers can reach out to people even more. Since this type requires smaller scales, low cost is therefore another advantage.

Fifth, although contingency is the best approach to evaluate the strategic decision making by entrepreneurs, most researchers believed this theory still exists a lot of inconsistency (Michor, Harms, Schwarz & Breitenecker, 2010; Black & Boal, 1994; Barney & Clark, 2007; Vanhouttee, 2010; Wiklund and Shepherd, 2005; Miller, 1981; Hambrick & Mason.1984). Therefore, previous researchers agreed that configuration theory can cover the shortfall of the contingency theory. According to Mugler (2004),

the configuration theory does not focus absolutely on the venture's environment, or exclusively on its internal resources, but on the mutual influence of a set of variables. The theory signifies the interrelationships model between variables (contingents). In the strategic of SMEs development context, he listed four variables which played a decisive role in the configuration theory. They are; the environment of the firm, the resources of the firm, the personality of the entrepreneur, and the management system adopted.

Finally, few scholars agreed that configuration theory is best suited to analyze the strategic development of nascent ventures (Korunka, et al., 2003; Harms et al., 2009; Michor, et al., 2010; Vanhoutte, et al., 2010; Chatterjee, 2014). Although the configuration theory was originally developed for large organizations, but from past seminal works, this theory has been adapted for smaller organizations (Covin & Slevin, 1991; Gartner, 1985; Snuif & Zwart, 1994). In the Korunka, et al. (2003) study, these authors suggest the configuration theory can be examined within the nascent venture context which divided into sets of aspects; characteristics of the entrepreneurs, resources of the nascent entrepreneurs, environment, and organizing activities (management). This argument is supported by the studies done by Harms et al. (2009) and Michor, et al. (2010) where they agree the configuration theory is fit for nascent ventures as it captures the holistic nature of new ventures and offers the opportunity to model their performance and development while Vanhoutte, et al. (2010) agreed the use of configuration theory in the means of probing the effect of interrelation between initial resources, strategy, and environment which exists in start-up ventures.

## 5.6 Chapter summary

The purpose of this study was to investigate the relationships between entrepreneurial bricolage, entrepreneurial orientation (EO) and nascent venture performance in Malaysia. Besides that, this study also tested the possibility of moderating effect of resources acquisitions (government assistance program and online social networking) to the relationships between the independent variables (Entrepreneurial Bricolage and EO) and dependent variable (nascent venture performance).

The empirical findings supported three out of twelve hypotheses developed and rejected the rest nine hypotheses; thereby answering all the research questions despite some identified limitations, and also supported the key theoretical positions upon which the present study has been drawn. In addition, the research findings are consistent with a number of previous empirical studies conducted in the domain of current research underpinning theories.

The research framework of this study contributes to the existing body of knowledge in early phase of entrepreneurship literature. The theoretical contributions and practical implications are also significant findings for malay entrepreneurs especially for nascent ventures development in the country. Finally, some limitations are also acknowledged that indicate future research directions.

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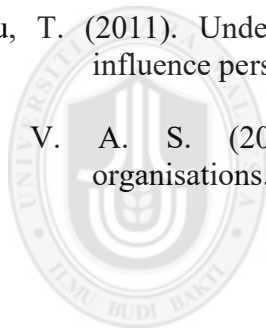
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## APPENDICES

### APPENDIX A: GEM report on economic development level

GEM Economies by Geographic Region and Economic Development Level

|                             | Factor-Driven Economies  | Efficiency-Driven Economies   | Innovation-Driven Economies  |
|-----------------------------|--|---|--|
| Latin America & Caribbean   |  | Argentina <sup>2</sup> , Barbados <sup>2</sup> , Brazil <sup>2</sup> , Chile <sup>2</sup> , Colombia, Ecuador, Guatemala, Jamaica, Mexico <sup>2</sup> , Panama <sup>2</sup> , Peru, Suriname, Uruguay <sup>2</sup> | Trinidad and Tobago  |
| Middle East & North Africa  | Algeria <sup>1</sup> , Iran <sup>1</sup> , Libya <sup>1</sup>                        |   | Israel   |
| Sub-Saharan Africa          | Angola <sup>1</sup> , Botswana <sup>1</sup> , Ghana, Malawi, Nigeria, Uganda, Zambia | Namibia, South Africa   |  |
| Asia Pacific and South Asia | India, Philippines, Vietnam  | China, Indonesia, Malaysia <sup>2</sup> , Thailand  | Japan, Republic of Korea, Singapore, Taiwan  |
| Europe EU28                 |  | Croatia <sup>2</sup> , Estonia <sup>2</sup> , Hungary <sup>2</sup> , Latvia <sup>2</sup> , Lithuania <sup>2</sup> , Poland <sup>2</sup> , Romania, Slovak Republic <sup>2</sup>                                     | Belgium, Czech Republic, Finland, France, Germany, Greece, Ireland, Italy, Luxemborg, Netherlands, Portugal, Slovenia, Spain, Sweden, United Kingdom |
| Europe Non-EU28             |  | Bosnia and Herzegovina, Macedonia, Russian Federation <sup>2</sup> , Turkey <sup>2</sup>  | Norway, Switzerland  |
| North America               |  |   | Canada, Puerto Rico, United States   |

*Note.* xxx<sup>1</sup> : In transition phase between Factor-Driven and Efficiency-Driven. xxx<sup>2</sup> : In transition phase between Efficiency-Driven and Innovation-Drive. Adopted from Global Entrepreneurship Monitor Report (2013)



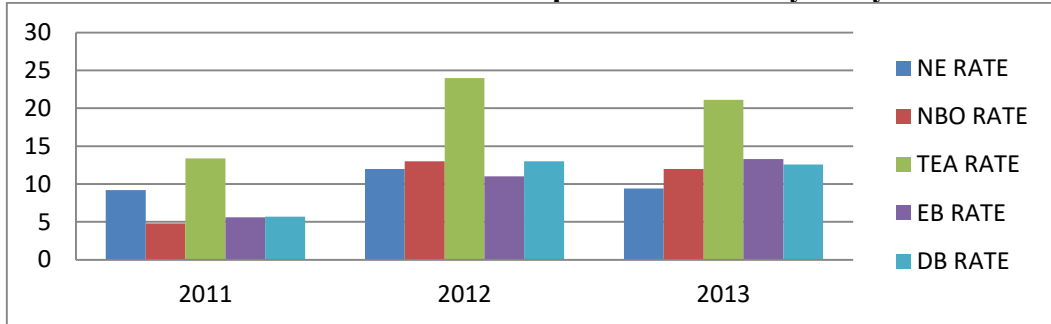
## APPENDIX B: GEM entrepreneurial activity report

GEM Entrepreneurial Activity in 3 years by Phase of Economic Development, 2011,2012 and 2013

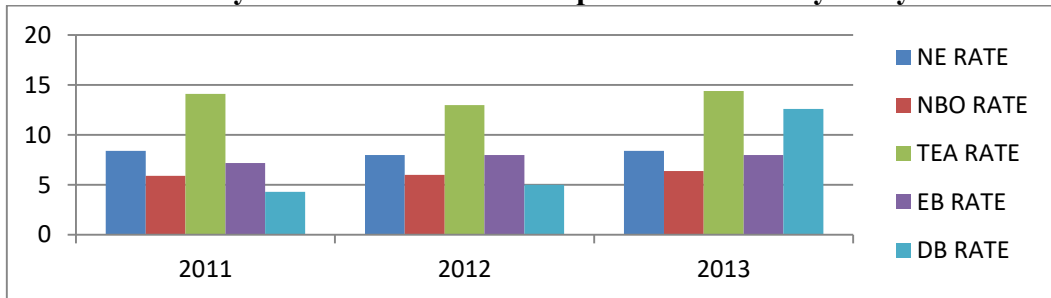
| Economic Development Phase              | Nascent entrepreneurship rate |      |      | New business ownership rate |      |      | Early-stage entrepreneurial activity (TEA) rate |      |      | Established business ownership rate |      |      | Discontinuation of business |      |      |
|---|-------------------------------|------|------|-----------------------------|------|------|---|------|------|-------------------------------------|------|------|-----------------------------|------|------|
| YEAR                                    | 2011                          | 2012 | 2013 | 2011                        | 2012 | 2013 | 2011  | 2012 | 2013 | 2011                                | 2012 | 2013 | 2011                        | 2012 | 2013 |
| Phase 1:<br>Factor-Driven Economies     | 9.2                           | 12   | 9.4  | 4.8                         | 13   | 12.0 | 13.4  | 24   | 21.1 | 5.6                                 | 11   | 13.3 | 5.7                         | 13   | 12.6 |
| Phase 2:<br>Efficiency-Driven Economies | 8.4                           | 8    | 8.4  | 5.9                         | 6    | 6.4  | 14.1  | 13   | 14.4 | 7.2                                 | 8    | 8.0  | 4.3                         | 5    | 4.2  |
| Phase 3:<br>Innovation-Driven Economies | 4                             | 4    | 4.7  | 3                           | 3    | 3.3  | 6.9   | 7    | 7.9  | 7.2                                 | 7    | 6.7  | 2.7                         | 3    | 2.8  |

Source: Global Entrepreneurship Monitor Report (2013)

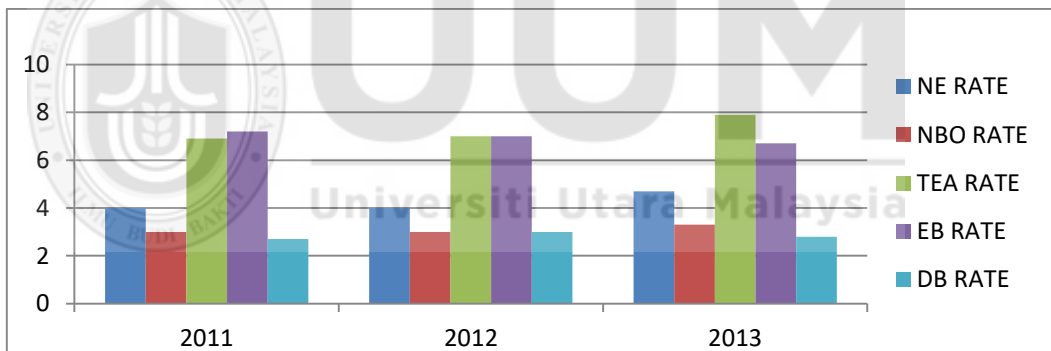
### The factor-driven economies entrepreneurial activity in 3 years



### The efficiency-driven economies entrepreneurial activity in 3 years



### The innovation-driven economies entrepreneurial activity in 3 years



*Note:* NE RATE: Nascent Entrepreneurship Rate, NBO RATE: New Business Ownership Rate, TEA RATE: Total Entrepreneurial Activity Rate, EB RATE: Established Business Ownership Rate, DB RATE: Discontinuation of Business Rate. Adapted from Global Entrepreneurship Monitor Report (2013)

## APPENDIX C: GEM entrepreneurial activity in Asia region

GEM Entrepreneurial Activity in Asia Pacific & South Asia Region, 2013

| Country         | Nascent<br>entrepreneurship rate | New business<br>ownership rate | Early-stage<br>entrepreneurial activity<br>(TEA) rate | Established<br>business<br>ownership rate | Discontinuation of<br>business |
|-----------------|----------------------------------|--------------------------------|---|---|--------------------------------|
| China           | 5.2                              | 8.9                            | 14  | 11  | 2.7                            |
| India           | 5.1                              | 4.9                            | 9.9   | 10.7                                      | 1.5                            |
| Indonesia       | 5.7                              | 20.4                           | 25.5  | 21.2                                      | 2.4                            |
| Japan           | 2.2                              | 1.5                            | 3.7   | 5.7                                       | 1.5                            |
| Korea           | 2.7                              | 4.2                            | 6.9   | 9   | 2.5                            |
| <b>Malaysia</b> | <b>1.5</b>                       | <b>5.2</b>                     | <b>6.6</b>  | <b>6</b>                                  | <b>1.5</b>                     |
| Philippines     | 12                               | 6.7                            | 18.5  | 6.6                                       | 12.3                           |
| Singapore       | 6.4                              | 4.4                            | 10.7  | 4.2                                       | 3.3                            |
| Taiwan          | 3.3                              | 5                              | 8.2   | 8.3                                       | 5                              |
| Thailand        | 7.9                              | 10.4                           | 17.7  | 28  | 3.5                            |
| Vietnam         | 4                                | 11.5                           | 15.4  | 16.4                                      | 4.2                            |

## **APPENDIX D: Malaysian most actives agencies in business assistance program**

### **1. INSKEN (Institut Keusahawanan Negara)**

INSKEN was established under Ministry of International Trade and Industry on 12 January 2005 and officially launched by the Prime Minister of Malaysia, Yang Amat Berhormat Dato' Sri Mohd Najib bin Tun Abdul Razak on 22nd May 2006. This agency is responsible in implementing entrepreneurship training and guidance programs to improve and strengthen the knowledge and expertise of the existing and future entrepreneurs. The implementation of INSKEN programs covers various stages ranging from the entrepreneurship acculturation, basic entrepreneurship, improvement and expansion of business networks stages. Apart from that, counseling and guidance services are also provided for existing and future entrepreneurs (INSKEN, 2013). This agency not only stands to endow with training and assistance for entrepreneurs, also financial assistance is provided to help new entrepreneurs start their business. The programmed offered by INSKEN includes Undergraduates Entrepreneur Scheme, Entrepreneurial Coaching Course, Entrepreneurship Enhancement and Advanced Courses, and Expansion and Networking Course.

### **2. PUNB (Perbadanan Usahawan Nasional Berhad)**

Perbadanan Usahawan Nasional Berhad (PUNB) is Malaysia's national entrepreneur development corporation. PUNB is aim to develop bumiputera entrepreneurs in strategic and high potential businesses in line with the National Development Policy (NDP) to build a dynamic, resilient and progressive bumiputera Commercial and

Industrial Community (BCIC). In addition, PUNB also focused to develop truly professional, highly ethical and genuine bumiputera entrepreneurs; whose involvement and contribution is pivotal to the country's economic growth. This agency was established under the Malaysian Companies Act 1965 on 17th July 1991 as a wholly owned subsidiary to Yayasan Pelaburan Bumiputra (PUNB, 2013). PUNB's business operations are focused on providing integrated entrepreneur development packages to assist Bumiputera entrepreneurs in Retail and Small and Medium sized Enterprise (SME) sectors. These development packages are designed to help Bumiputera entrepreneurs develop business acumen, maintain a profitable venture, and shape their enterprise; par excellence.

PUNB also aimed to increase the quantity and enhance the quality of bumiputera entrepreneurs in the industrial and commercial sectors, to promote the development of resilient bumiputera entrepreneurs in strategic industries, and to instil entrepreneurial culture amongst bumiputera entrepreneurs, and equip them with adequate knowledge and experience. PUNB introduced a special program for young graduates - Program Siswazah Perantis to help unemployed young bumiputera graduates acquiring skills in managing a business through an attachment program at companies under PUNB (Mentor) stable. Participants (apprentices) of this program will have a hands-on learning experience managing a business apart from theoretical training and courses. The objectives of the program is to provide opportunities for young graduates to venture into retail and distribution business, to help young graduates to accumulate knowledge through skill trainings and courses, and to enhance young graduates' skills in line with the industrial needs to facilitate employment opportunities.

### **3. MARA (Majlis Amanah Rakyat)**

Majlis Amanah Rakyat (MARA), or the Council of Trust for the People, an agency under the purview of the Ministry of Rural and Regional Development, was established on 1 March 1966 as a statutory body by an Act of Parliament as a result of the first Bumiputera Economic Congress resolution in 1965. The Council is responsible for developing, encouraging, facilitating and fostering the economic and social development in the federation, particularly in rural areas.

MARA is an autonomous body, responsible to the Minister of Rural and Regional Development. The MARA Council consists of the Chairman, Deputy Chairman and nine other members, three of whom are from the civil service. All Committee Members are appointed by the Minister of Rural and Regional Development. MARA is supported by 14 offices at the state level including the Federal Territory of Kuala Lumpur and Labuan and offices at the district level. In addition, MARA has offices which operate in London, Washington D.C., Jakarta, Dublin, Frankfurt and New South Wales. Unlike INSKEN and PUNB, MARA service not only focused on entrepreneurship sector only, but expanded to the education and investment sectors.

## APPENDIX E: Types of assistance programs

### *Types of assistance Programs provided by INSKEN, PUNB and MARA to entrepreneurs in Malaysia*

| Agency  | Financial assistance   | Non-financial assistance business support service  |
|---|--|--|
| National Institute of Entrepreneurship (INSKEN)<br>Institut Keusahawanan Negara | <b>Funding for Graduate Entrepreneur Fund (TUS)</b> <ul style="list-style-type: none"> <li>• Provided by the Government to applicants who have attended the Graduate Entrepreneur Scheme course and Graduate Entrepreneurship Basic Course organised by the Ministry of International Trade and Industry (MITI) only.</li> <li>• Participants of Graduate Entrepreneur Incubator Programme (PIUS) managed by SME Bank are also eligible to apply for the TUS fund.</li> <li>• Application is open to applicants who wish to start a business, or who already run a business or who wish to expand their business. Applicants are required to take courses to qualify for the TUS funding applications through SME Bank.</li> </ul> | <b>Undergraduates Entrepreneur Scheme</b><br>Graduate Entrepreneur Scheme (SUS) is a programme organised by the National Institute of Entrepreneurship (INSKEN), Ministry of International Trade and Industry (MITI) in collaboration with Universiti Teknologi MARA (UiTM), Universiti Sains Malaysia (USM), Universiti Utara Malaysia (UUM), Universiti Tun Abdul Razak (UNIRAZAK) for the course implementation and with Small & Medium Enterprises Bank Malaysia Berhad (SME Bank) for Graduate Entrepreneurs Fund loan. The programme includes two components: the <i>Graduate Entrepreneur Scheme (course)</i> and <i>Graduate Entrepreneur Fund (loan)</i> .<br><br><b>Entrepreneurial Coaching Course</b> <ul style="list-style-type: none"> <li>• Provides advice, guidance and facilitation to the entrepreneurs.</li> <li>• Provides reference information on entrepreneurship and entrepreneurship.</li> <li>• Implementing coaching and mentoring.</li> </ul><br><b>Entrepreneurship Enhancement and Advanced Courses</b> <ul style="list-style-type: none"> <li>• providing basic exposure in entrepreneurship to the public who will become entrepreneurs</li> </ul><br><b>Expansion and Networking Course</b> <ul style="list-style-type: none"> <li>• Collaborating with business chambers, trade and industry associations, and non-government organizations (NGOs) to provide course, convention, and entrepreneurship workshop for entrepreneurs.</li> <li>• Planning, implementing and coordinating special programs for women entrepreneurship.</li> <li>• Providing follow-up and monitoring of former participants.</li> </ul> |

Continue Table 2.6

|   |  |  |
|---|--|--|
| <p>PUNB<br/>(Perbadanan<br/>Usahawan<br/>Nasional Berhad)</p> | <p><b>RM 5k – RM 100k</b></p> <ul style="list-style-type: none"> <li>• PROSPER Usahawan Muda scheme offers financing between RM5k to RM100k to start up your business. Suitable for Young Bumiputera who are keen to venture into business.</li> </ul> <p><b>RM 100k – RM 1mil</b></p> <ul style="list-style-type: none"> <li>• PROSPER Runcit scheme offers financing between RM100k to maximum RM1mil for entrepreneurs' business needs. Suitable for bumiputera entrepreneurs who are keen to venture or expand their retail business.</li> </ul> <p><b>RM500k- RM 5 Mil</b></p> <ul style="list-style-type: none"> <li>• PROSPER Pemborong Scheme. Suitable for bumiputera entrepreneurs who are keen to venture or expand their wholesale distribution or supply business.</li> <li>• SME Scheme. Suitable for Bumiputera entrepreneurs in Small &amp; Medium Enterprises who are keen to set or grow their manufacturing or services business of high growth and export potential. Entrepreneur Development &amp; Training.</li> </ul> | <p><b>Siswazah Perantis Programme</b><br/>PUNB introduced a special programme for young graduates - Program Siswazah Perantis to help unemployed young Bumiputera graduates acquiring skills in managing a business through an attachment programme at companies under PUNB (Mentor) stable. Participants (apprentices) of this programme will have a hands-on learning experience managing a business apart from theoretical training and courses.</p> <p><b>Corporate advisory (Development &amp; Monitoring)</b><br/>PUNB offers advisory facility where Business Services and Entrepreneurial Skill Courses are also made available in further equipping passionate entrepreneurs. Among business services available are</p> <ul style="list-style-type: none"> <li>• For pre-business operations</li> <li>• Premises review</li> <li>• Monitoring of Accounts</li> <li>• Business advisory</li> </ul> <p><b>Training (Entrepreneur &amp; Enterprise Development)</b><br/>In addition to financing facilities, PUNB also provides training for PUNB entrepreneurs to enhance their entrepreneurial skills and develop their enterprise. Some of these training programmes are also open to the public.</p> <p><b>Business Development (Networking &amp; Promotion)</b><br/>Network distribution is the key to successful business, therefore PUNB creates an active platform for both public and PUNB entrepreneurs to expand their networks by participating in events organised by PUNB.</p> |
|---|--|--|



Continue Table 2.6

|                             |  |  |
|-----------------------------|--|--|
| MARA (Majlis Amanah Rakyat) | <p><b>Business Improvement Financing Scheme (SPPP)</b><br/>This scheme includes trade financing for projects, services, manufacturing and transportation.</p> <p><b>Commercial Financing Scheme</b><br/>This financing scheme for the purpose of: -</p> <ul style="list-style-type: none"> <li>• Purchase of Business Premises permanent class and completed.</li> <li>• Construction of Business Premises on the ground of their own.</li> </ul> <p><b>Express Contract Financing Scheme (SPIKE)</b><br/>Funding for the work - construction contracts, supplies, services and electrical work. Financing includes contracts for class F, E and D for the work of public agencies.</p> <p><b>MARA Entrepreneur Guarantee Scheme (SJUM)</b><br/>SJUM is a financing facility for selected entrepreneurs. Through this scheme, MARA cooperates with commercial banks which provide financing and MARA as guarantor.</p> | <p><b>Entrepreneur Training</b><br/>Entrepreneurship Training is aimed to equip entrepreneurs with knowledge, skills and entrepreneurship skills to become entrepreneurs viable and competitive. The programs cover entrepreneurship training courses, training, seminars, workshops the input exposure, knowledge and skills in the level of entrepreneurial culture, the creation of entrepreneurs as well as the enhancement and strengthening organized by Entrepreneur and PUSMA , also cooperation with other government agencies, private and non-governmental organizations (NGOs).</p> <p><b>Business Consultation Service</b><br/>Business Advisory Service Scheme is a facility provided to help solve problems or improve performance and productivity entrepreneurs / companies through quality advice and effective conducted by a panel facilitator Mara. It acts as a central local (one-stop center) that has a variety of skills in the field advisory services to be offered to Bumiputera entrepreneurs.</p> <p><b>Marketing Development</b><br/>Because of nascent entrepreneurs facing the marketing challenge of unable to cooperate well with the open market and competitors, this programme is to help entrepreneurs promote and enhance demand on products Bumiputera.</p> <p><b>Technopreneur Development</b><br/>Technopreneurship program is a program to increase capacity and capability of existing entrepreneurs to small businesses, medium (SMEs) and large (Large Company) according to the respective class. The implementation through collaboration between MARA Partners with Intelligent Technology the Higher Education Institutions (IPTA) and private (IPTS), Agency &amp; Body Government or Private Sector Technology Providers with expertise based research and strategic technology.</p> |
|-----------------------------|--|--|

Source: Adopted from INSKEN (2013), PUNB (2013), and MARA (2013).

## **APPENDIX F: Technology Acceptance Model (TAM)**

TAM was developed to explain the causal relationship of intention- behavior in predicting the technology acceptance (Tong, 2010). TAM has been developed by Davis (1989) and widely discussed among previous researchers as it unable to predict the influence of volitional, situational and social conditions (Venkatesh, 2000; Venkatesh and Davis, 2000; Aleke, et al., 2011; Taylor and Todd, 1995a). Two important TAM constructs are perceived usefulness and perceived ease of use. Perceived usefulness is defined as the extent to which a person believes that using a particular technology will enhance her/his job performance, while perceived ease of use is the degree to which using IT is free of effort for the user (Davis, 1989). The study focuses on the TAM because it helps to understand the role of perceptions such as usefulness and ease of use in determining technology adoption. TAM theories that external variables influence behavioral intention to use, and actual usage of technologies, indirectly through their influence on perceived usefulness and perceived ease of use. Davis (1989, p.320), defines perceived usefulness as “the degree to which a person believes that using a particular system would enhance his or her productivity”, and perceived ease of use as “the degree to which a person believes that using a particular system would be free of effort”.

Furthermore, there has been some concern about the predictive ability of TAM. Straub et al. (1995) questioned intention as a predictor of actual behavior. Bentler and Speckart (1979), and Songer-Nocks, (1976) earlier disagreed with Fishbein and Ajzen’s assertion (on which TAM is based) that attitudes and norms can influence behavior only indirectly through behavioral intention. Nevertheless, TAM researchers have called for future research using actual usage instead of usage intention to test the TAM. Present research has pulled this line of suggestion

by investigating actual or current usage as the dependent variable. A significant body of TAM studies has shown that perceived usefulness and perceived ease of use are determinants of usage (e.g. Davis, 1989; Mathieson, 1991; Adams, Nelson & Todd, 1992; Segars & Groover, 1993; Igbaria et al., 1997). Technology adoption decisions have been typically characterized by a strong productivity orientation (Venkatesh and Brown, 2001). In many studies (Mathieson, 1991; Igbaria et al., 1997), perceived usefulness, one of the constructs related to the use of the productivity contingency has emerged as one of the strongest predictors of adoption and usage behavior. Young generation is generally known as enthusiastic people who want to achieve the best goals through the optimal effort which would incur high cost. Therefore, the theory of acceptance model will help this study to recognize the perception of young generation towards technology adoption and usability through social networking.

From the previous discussions on TAM theory, it has been concluded that TAM has played the role in user acceptance of technology. As noted by Lu et al. (2003, p. 207), they state that, “throughout the years, TAM has received extensive empirical support through validations, applications and replications for its power to predict use of information systems”. Whereas Legris et al. (2003), they conclude that “TAM has proven to be a useful theoretical model in helping to understand and explain user behaviour in information system implementation (p.202)”. These findings remark TAM is the best theory in predicting the users behavior on technology. However, Baron, Patterson and Harris (2006) argued that the TAM theory model used to attempt to explain and predict technology acceptance only. They continued contended that TAM theory might not cover all the areas of behavior aspects and factors. Thus, Venkatesh, Morris, Davis and Davis (2003) again reviewed the literature on eight IT acceptance research models (TRA; TAM; motivational model; theory of planned behaviour; model combining

TAM and theory of planned behaviour; model of PC utilisation; innovation diffusion theory; and social cognitive theory). By integrating elements across the eight models, they developed and empirically validated a revised version of the TAM, that they called the unified theory of acceptance and use of technology (UTAUT).



## APPENDIX G: Calculation of sample size

Where t = value for selected alpha level of .025 in each tail = 1.96

Where s = estimate of standard deviation in the population = 1.25.

Where d = acceptable margin of error for mean being estimated = 0.15

$$n_0 = \frac{(1.96)^2 * (1.25)^2}{(0.15)^2}$$

$$n_0 = \frac{3.842 * 1.563}{0.0225}$$

$$n_0 = \frac{6.005}{0.0225} = 267$$

Cochran's (1977) correction formula;

Where population size = 807.

Where  $n_0$  = required return sample size according to Cochran's formula = 267.

Where  $n_1$  = required return sample size because sample > 5% of population.

$$n = \frac{267}{(1 + (267/807))}$$

$$n = \frac{267}{1.33} = \mathbf{201}$$

## APPENDIX H: The original Instruments of variable EB, EO, GAP, OSN

### 1. Entrepreneurial Bricolage (EB)

|   |
|---|
| 1. We are confident of our ability to find workable solutions to new challenges by using our existing resources                       |
| 2. We gladly take on a broader range of challenges than others with our resources would be able to.                                   |
| 3. We use any existing resource that seems useful to responding to a new problem or opportunity                                       |
| 4. We deal with new challenges by applying a combination of our existing resources and other resources inexpensively available to us. |
| 5. When dealing with new problems or opportunities we take action by assuming that we will find a workable solution.                  |
| 6. By combining our existing resources, we take on a surprising variety of new challenges.  |
| 7. When we face new challenges, we put together workable solutions from our existing resources.                                       |
| 8. We combine resources to accomplish new challenges that the resources weren't originally intended to accomplish.                    |

Source: Senyard, et al., (2009).

### 2. Entrepreneurial Orientation (EO)

|   |
|---|
| <b>Innovativeness</b>   |
| 1. [In general, the top managers of my firm favor] a strong emphasis on R&D, technological leadership, and innovations  |
| 2. Very many new lines of products/services [marketed in the past 5 years].   |
| 3. Changes in product or service lines have usually been quite dramatic.  |
| <b>Proactiveness</b>  |
| 4. In dealing with competitors, my firm] typically initiates actions which competitors then respond to.   |
| 5. [In dealing with competitors, my firm] is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.. |
| 6. [In general, the top managers of my firm have] a strong tendency to be ahead of others in introducing novel ideas or products.                                       |
| <b>Risk-taking</b>  |
| 7. A strong proclivity for high risk projects (with chances of very high returns)   |
| 8. Owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm's objectives.  |
| 9. When confronted with decisions involving uncertainty, my firm typically adopts a bold posture in order to maximize the probability of exploiting opportunities.      |

Source: Lumpkin & Dess (1996).

### 3. Government assistance program (GAP)

*The effectiveness of government assistance program in the Hung and Effendi (2011) study*

|  |
|--|
| <b>Do government bodies/agencies...</b>  |
| <ol style="list-style-type: none"> <li>1. Provide consultation to your organization through an informal network?</li> <li>2. Communicate economic development policies to local community?</li> <li>3. Identify economics development opportunities in your local area?</li> <li>4. Provide channels that handle the problems and issues facing by your organization? (such as advisory bodies)</li> <li>5. Provide consultation to your organization through a formal network?</li> <li>6. Have a flexible policies and regulations?</li> <li>7. Dedicate resources to promoting economic development? (e.g. Economic Planning Unit)</li> <li>8. Provide relevant information/ knowledge that assist your organization?</li> <li>9. Create a local business environment that encourages business development?</li> <li>10. Provide relevant information/ knowledge that benefit to your organization? (such as seminars, courses, conferences)</li> </ol> |

Source: Hung & Effendi (2011)

|  |
|--|
| <b>Government Supports</b>   |
| <ol style="list-style-type: none"> <li>1. The tax policy for our firm is preferable.</li> <li>2. The government departments/agencies offer plenty and clear policy information to us.</li> </ol>   |
| <b>Training and Research &amp; Development (R&amp;D) institutions</b>  |
| <ol style="list-style-type: none"> <li>3. Our firm gets a lot of information, knowledge and technology from training and R&amp;D institutes.</li> <li>4. We had a good education and training condition offered by training and R&amp;D institutes.</li> </ol> |
| <b>Financial Assistance</b>  |
| <ol style="list-style-type: none"> <li>5. Our firm finds access to start-up capital easily.</li> <li>6. We could get money from other non-bank financial source.</li> </ol>  |
| <b>Legal and Institutional Environment</b>   |
| <ol style="list-style-type: none"> <li>7. Current labour institutions are advantageous for us to attract and retain person with ability.</li> <li>8. The legal right and interest of investors and entrepreneurs is guaranteed.</li> </ol>                     |

Sources: Zainol & Wan Daud (2011)

#### 4. Online social networking adoption (OSN)

|   |
|---|
| <b>Performance expectancy</b>   |
| 1. I would find the system useful in my job.  |
| 2. Using the system enables me to accomplish tasks more quickly.                      |
| 3. Using the system increases my productivity.  |
| 4. If I use the system, I will increase my chances of getting a raise.                |
| <b>Effort expectancy</b>  |
| 5. My interaction with the system would be clear and understandable.                  |
| 6. It would be easy for me to become skillful at using the system.                    |
| 7. I would find the system easy to use.   |
| 8. Learning to operate the system is easy for me.                                     |
| <b>Attitude toward using technology</b>   |
| 9. Using the system is a bad/good idea.   |
| 10. The system makes work more interesting.   |
| 11. Working with the system is fun.   |
| 12. I like working with the system.   |
| <b>Social influence</b>   |
| 13. People who influence my behavior think that I should use the system.              |
| 14. People who are important to me think that I should use the system.                |
| 15. The senior management of this business has been helpful in the use of the system. |
| 16. In general, the organization has supported the use of the system                  |

Source. Venkatesh, et al., (2003)



## APPENDIX I: Survey Questionnaire

For researcher use only

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

### A SURVEY ON NASCENT VENTURES' PERFORMANCE IN MALAYSIA

#### Survey Information

This survey is conducted by Rusnifaezah Musa, from School of Business, Universiti Utara Malaysia for her doctoral degree (PhD) requirement. Her research project is supervised by Dr. Norashidah Hashim and Dr. Thi Lip Sam. This study is conducted to explore the development of nascent venture in Malaysia at various aspects of entrepreneurs' personality, factors contributed to the development of venture, and its impacts to the firm performance. Nascent venture is defined in this study as ***“the start-up business by entrepreneurs who are engaging with innovative and newness ideas, in the emerging stage of entrepreneurial process, actively seeking opportunities and assistance for business development, and the business is not more than 4 years old”***.

The questionnaire consists of **FIVE (5)** major parts, namely: (1) respondent's profile, (2) entrepreneur's personality test, (3) factors influencing the development of business, (4) business performance, and (5) firm's profile. The survey takes not more than 20 minutes. We would appreciate if you could complete the attached questionnaire and return it using a reply-paid envelope at your earliest possible. Alternatively, you may respond online at

We will be pleased to provide you with an extended executive summary of the study. Feel free to provide contact details as requested in the questionnaire.

#### Contact information

e-mail: [rusnifaezah@gmail.com](mailto:rusnifaezah@gmail.com); [s93570@student.uum.edu.my](mailto:s93570@student.uum.edu.my)  
Tel: 012-5544464

**Your responses are highly important for the accuracy of this study.  
Kindly return the completed questionnaire at your earliest convenience.**

**Dear Business Owner,**

In the start-up phase, the strategy of nascent company remains vague. The role played by government is enormous for the development of nascent business. The rise of social networking sites in the business also provides an opportunity for nascent entrepreneurs in planning their business strategy. Breaking the traditional way of business, social networking sites have been recognized as the best platform to sell products, as well as increase the networking between SME owners like you and the customers. By recognizing that the future of SMEs in Malaysia relies heavily on the efforts of the SME owners such as you, we are eager to learn about your own experiences. Particularly, we are seeking information about your consideration of determinants of business success, which will align with your firm's strategy. We envisage that your contribution could be transferred back directly into the efforts designed to generate more successful ventures in Malaysia.

There will be no right or wrong answers to these questions. All results will be used for research purpose only. Your participation in this survey is completely voluntary. Your responses for this survey will have no impact on any of your work-related and personal record. Nevertheless, your cooperation is **VITAL** to this study. The information you provide is **STRICTLY CONFIDENTIAL** and will only be used for the purpose of this study. Please read the instructions carefully and answer as accurately as possible. Should you have any questions concerning this survey, please feel free to contact me. Your participation will certainly make a significant contribution to my research. Thank you very much for your time, cooperation, and effort.

The findings of this research project will be reported in the thesis that will be submitted to the Northern University of Malaysia, as required for the degree of Doctor of Philosophy. If you would like to speak to someone regarding this project, please refer to the supervisor's information as given below. If you would like to receive a copy of the study results, please complete the form at the end of survey or email me at [rusnifaezah@gmail.com](mailto:rusnifaezah@gmail.com).

For the purpose of this study, we require those who meet the following inclusionary criteria:

1. Individuals who started their own business,
2. Individuals who are actively participating in the management of the business,
3. The business must be at least 2 years old, but not more than 5 years old, and
4. The business must have less than 200 employees.

Thank you in advance.

Sincerely,

.....  
Rusnifaezah Bt. Musa  
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Othman Yeop Abdullah Graduate Business School (OYAGSB)  
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Email: [lsthi@uum.edu.my](mailto:lsthi@uum.edu.my)

Please answer ALL questions in this questionnaire. Your responses will be treated strictly confidential and will only be used for the purpose of this study. Your information will not be forwarded or employed by any other individual or organization. As each respondent may perceive the question differently, there is therefore no right or wrong answers. What is important, you have to answer all the questions as honest as you can by reading carefully each of the following questions.

## SECTION A: PERSONAL BACKGROUND INFORMATION

Below are few questions on your personal background. The following questions are meant only for analysis purpose. Kindly answer by writing or tick (✓) your choice of answer:

### Q1. Your gender:

☐

Male

☐

Female

### Q2. Your current age:

☐

18 - 35 years old

☐

46 - 55 years old

☐

36 - 45 years old

☐

56 years old and above

### Q3. Your highest qualification:

☐

SPM / STPM

☐

Master Degree

☐

Diploma

☐

Doctorate (PhD, DBA, etc)

☐

Bachelor's Degree

☐

Professional Qualifications / others. Please specify;.....

### Q4. Your age when you started this business:

☐

18 - 35 years old

☐

46 - 55 years old

☐

36 - 45 years old

☐

56 years old and above

### Q5. Have you had any previous work experience?

☐

Yes

☐

No

If yes, for how long did you work before you started up your current business?

☐

Below than 5 years

☐

11 – 15 years

☐

6 - 10 years

☐

16 years old and above

### Q6. Was your previous work experience relevant to your current business?

☐

Yes

☐

No

### Q7. Did you have business start-up experience prior to this business?

☐

Yes

☐

No

If yes, for how long did you in the previous business?

☐

Below than 2 year

☐

6 - 8 years

☐

2 - 5 years

☐

8 years old and above

## SECTION B: RESEARCH INFORMATION

Kindly answered all questions honestly. Please indicate to what extent you agree with the statements below by ticking (✓) for your response according to the following scale.

| 1                    | 2        | 3                             | 4     | 5              |
|----------------------|----------|-------------------------------|-------|----------------|
| STRONGLY<br>DISAGREE | DISAGREE | NEITHER DISAGREE<br>NOR AGREE | AGREE | STRONGLY AGREE |

|            |   | Strongly<br>Disagree       | Strongly<br>Agree   |
|------------|---|----------------------------|---|
| <b>Q8</b>  | We gladly take on a broader range of challenges than others with our resources would be able to.                                  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| <b>Q9</b>  | We use any existing resource that seems useful to responding to a new problem or opportunity                                      | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| <b>Q10</b> | We deal with new challenges by applying a combination of our existing resources and other resources inexpensively available to us | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| <b>Q11</b> | When dealing with new problems or opportunities we take action by assuming that we will find a workable solution                  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| <b>Q12</b> | By combining our existing resources, we take on a surprising variety of new challenges  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| <b>Q13</b> | We combine resources to accomplish new challenges that the resources weren't originally intended to accomplish                    | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| <b>Q14</b> | We deal with new challenges by applying a combination of our existing resources and other resources inexpensively available to us | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |

|            |   |                            |                            |                            |                            |                            |
|------------|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <b>Q15</b> | When dealing with new problems or opportunities we take action by assuming that we will find a workable solution    | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q16</b> | When we face new challenges, we put together workable solutions from our existing resources                         | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q17</b> | We emphasize more on new innovations and technology usage.  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q18</b> | Our company offer new products/ services in the past few years.   | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q19</b> | We make an innovation to our products/ services rapidly.  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q20</b> | We initiate first action in business before our competitor do.  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q21</b> | We often to be first in introducing the products/ services or new technology/ marketing/ operation of the business. | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q22</b> | We usually are very competitive and will not let the competitors be at top.   | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q23</b> | We like to take bold action by venturing in a high business/projects.   | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q24</b> | We are willing to invest a lot of time and/or money on something that might yield a high return.                    | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q25</b> | We tend to act “boldly” in situations where risk is involved.   | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q26</b> | We get a lot of knowledge from the programs provided by Government agency   | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |

|            |  |                            |                            |                            |                            |                            |
|------------|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <b>Q27</b> | The programs provided by government agencies offer clear policy information to us          | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q28</b> | We get a lot of technology assistance from the programs provided by government agency      | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q29</b> | It is easy for us to obtain loan from government agencies to support my business           | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q30</b> | The programs educated us to understand that the legal right of entrepreneurs is guaranteed | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q31</b> | Our business skill is improved after joined the programs offered by this agency            | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q32</b> | The programs educated us to understand that the interest of entrepreneurs is guaranteed    | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q33</b> | The tax policy for our firm is preferable  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q34</b> | We easily find access for my business start-up capital.                                    | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q35</b> | Online social networking is useful for our business.                                       | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q36</b> | Using online social networking enables us to accomplish tasks quickly.                     | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q37</b> | Using online social networking improves our business performance                           | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q38</b> | Online social networking is easy to use.   | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| <b>Q39</b> | Our interaction with online social networking is clear and understandable.                 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |

**Q40** It is easy for us to become skillful in using online social networking. ☐1 ☐2 ☐3 ☐4 ☐5

**Q41** Our trading partners think we should use online social networking for business. ☐1 ☐2 ☐3 ☐4 ☐5

**Q42** Our employees think we should use online social networking for business. ☐1 ☐2 ☐3 ☐4 ☐5

**Q43** In general, we supported the use of online social networking for business. ☐1 ☐2 ☐3 ☐4 ☐5

**Q44** Using online social networking for business is a good idea. ☐1 ☐2 ☐3 ☐4 ☐5

**Q45** Online social networking makes the business more interesting. ☐1 ☐2 ☐3 ☐4 ☐5

**Q46** We like to use online social networking for our business. ☐1 ☐2 ☐3 ☐4 ☐5

## SECTION C: BUSINESS PERFORMANCE

In this section, the statements below are about your business performance over the past 12 months. Kindly answered all questions honestly. Please indicate to what extent you agree with the statements below by ticking (✓) your response according to the following scale.

| 1                | 2           | 3         | 4         | 5              |
|------------------|-------------|-----------|-----------|----------------|
| VERY UNSATISFIED | UNSATISFIED | UNCERTAIN | SATISFIED | VERY SATISFIED |

| PERFORMANCE CRITERIA |   | DEGREE OF SATISFACTION WITH OWN BUSINESS PERFORMANCE |                            |                            |                            |                            |
|----------------------|---|--|----------------------------|----------------------------|----------------------------|----------------------------|
|                      |   | Very Unsatisfied                                     |                            |                            | Very Satisfied             |                            |
| Q47                  | Sales growth rate   | <input type="checkbox"/> 1                           | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| Q48                  | Return on business investment position relative to your major competitors | <input type="checkbox"/> 1                           | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| Q49                  | Market share  | <input type="checkbox"/> 1                           | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| Q50                  | Operating profit  | <input type="checkbox"/> 1                           | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| Q51                  | New product development   | <input type="checkbox"/> 1                           | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| Q52                  | Market development  | <input type="checkbox"/> 1                           | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| Q53                  | Stakeholder's growth and development                                      | <input type="checkbox"/> 1                           | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |

## SECTION D: FIRM INFORMATION

Below are few questions on your firm information. The following questions are meant only for analysis purpose. Kindly answer by writing or tick (✓) your choice of answer:

### Q54. Business age:

- |   |  |
|---|--|
| <input type="checkbox"/> 0 – 3 months old         | <input type="checkbox"/> 3.5 years - 5 years old |
| <input type="checkbox"/> 3 months – 3.5 years old | <input type="checkbox"/> 6 years old and above   |

### Q55. Number of employees:

- |  |  |
|--|--|
| <input type="checkbox"/> Less than 5 persons | <input type="checkbox"/> 21- 100 persons       |
| <input type="checkbox"/> 6-20 persons        | <input type="checkbox"/> More than 100 persons |

### Q56. Business category:

- |  |   |
|--|---|
| <input type="checkbox"/> Manufacturing | <input type="checkbox"/> Construction         |
| <input type="checkbox"/> Services      | <input type="checkbox"/> Mining and Quarrying |
| <input type="checkbox"/> Agriculture   |   |



**Q57. Business location:**

- |   |  |
|---|--|
| <input type="checkbox"/> Shopping Center  | <input type="checkbox"/> Home-based              |
| <input type="checkbox"/> Downtown Area    | <input type="checkbox"/> Free Standing Locations |
| <input type="checkbox"/> Office Buildings |  |

**Q58. This business receives government assistance programs.**

- |                              |                             |
|------------------------------|-----------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|------------------------------|-----------------------------|

**If yes, what kind of assistance? (tick both if receive both types of assistance)**

- |  |  |
|--|--|
| <input type="checkbox"/> <b>Financial</b>  | <input type="checkbox"/> <b>Non-Financial (Business consultancy)</b> |
| <input type="checkbox"/> Soft loans  | <input type="checkbox"/> Entrepreneurship training program           |
| <input type="checkbox"/> Grant   | <input type="checkbox"/> Marketing assistance program                |
| <input type="checkbox"/> Sponsorship   | <input type="checkbox"/> Management assistance program               |
| <input type="checkbox"/> Asset assistance (building/ premises, machine/ equipment) | <input type="checkbox"/> Technical assistance program                |

**In early development, which programs benefit the business most?**

- |  |  |
|--|--|
| <input type="checkbox"/> Entrepreneurship training program | <input type="checkbox"/> Management assistance program |
| <input type="checkbox"/> Marketing assistance program      | <input type="checkbox"/> Technical assistance program  |

**Q59. Below are statements that describe the adoption of social networking sites for business. Kindly answer by writing or tick (✓) your choice of answer. You can tick more than one box.**

**a. The business have social network account.**

- |                              |                             |
|------------------------------|-----------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|------------------------------|-----------------------------|

**b. Type of social network account.**

- |                                    |  |
|------------------------------------|--|
| <input type="checkbox"/> Facebook  | <input type="checkbox"/> Blogs                         |
| <input type="checkbox"/> Twitter   | <input type="checkbox"/> Whatsapps/ wechat/ viber/Line |
| <input type="checkbox"/> Instagram | <input type="checkbox"/> Others. Please specify;.....  |

**c. Purpose of using social media**

- |   |  |
|---|--|
| <input type="checkbox"/> Selling product/service              | <input type="checkbox"/> Received complaints and feedbacks |
| <input type="checkbox"/> Promotion and advertising            | <input type="checkbox"/> Market survey                     |
| <input type="checkbox"/> Networking (Customers and suppliers) | <input type="checkbox"/> Others. Please specify;.....      |

**e. How many times the business updates the social media?**

- |   |
|---|
| <input type="checkbox"/> Not at all             |
| <input type="checkbox"/> Less than once a week  |
| <input type="checkbox"/> 2 or 3 times a week    |
| <input type="checkbox"/> About once a day       |
| <input type="checkbox"/> Several times each day |

**f. How frequent social media was used to promote the business?**

- ☐ Extremely frequent
- ☐ Quite frequent
- ☐ Neither frequent or infrequent
- ☐ Quite infrequent
- ☐ Extremely infrequent

**THIS SURVEY END HERE. THANK YOU VERY MUCH FOR YOUR COOPERATION**

**Would you like to receive an extended executive summary of findings from this study?**

- ☐ Yes, Please ☐ No, Thanks

**Would you mind to spend time for further interview on related issues?**

- ☐ Yes ☐ No

**If yes, kindly provide information below or attach a business card for executive summary delivery/ interview appointment**

**Name:**

**Position:**

**Company Address:**

**E-mail:**

|  |
|--|
|  |
|  |
|  |
|  |
|  |

**Thank you for taking the time to complete this questionnaire. Your assistance in providing this information is very much appreciated. Please check to make sure that you have not skipped any questions inadvertently. If there were anything else you would like to tell us about this survey, please do so in the space provided below.**

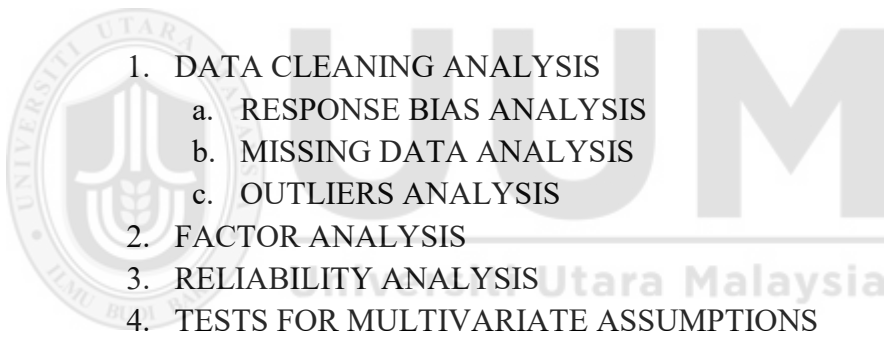
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THE MODERATING EFFECT OF RESOURCE ACQUISITION ON THE  
RELATIONSHIP BETWEEN ENTREPRENEURIAL STRATEGY AND PERFORMANCE  
OF MALAY-OWNED NASCENT VENTURE IN MALAYSIA

DATA ANALYSIS REPORT

MULTIVARIATE ANALYSIS WITH IBM

STATISTICAL PACKAGE FOR SOCIAL SCIENCES VERSION 20

- 
1. DATA CLEANING ANALYSIS
    - a. RESPONSE BIAS ANALYSIS
    - b. MISSING DATA ANALYSIS
    - c. OUTLIERS ANALYSIS
  2. FACTOR ANALYSIS
  3. RELIABILITY ANALYSIS
  4. TESTS FOR MULTIVARIATE ASSUMPTIONS
    - a. NORMALITY TEST
    - b. LINEARITY & HOMOSCEDASTICITY TEST
    - c. MULTICOLLINEARITY TEST
  5. MULTIVARIATE ANALYSIS
    - a. BIVARIATE REGRESSION ANALYSIS
    - b. MULTIPLE REGRESSION ANALYSIS
    - c. MODERATOR ANALYSIS

## 1. DATA CLEANING ANALYSIS

### a. RESPONSE BIAS ANALYSIS

| Group Statistics |         |     |        |                |                 |
|------------------|---------|-----|--------|----------------|-----------------|
|                  | respono | N   | Mean   | Std. Deviation | Std. Error Mean |
| MeanRAOSN        | 1       | 78  | 4.16   | .649           | .073            |
|                  | 2       | 106 | 4.22   | .520           | .051            |
| MeanESEB         | 1       | 78  | 3.96   | .448           | .051            |
|                  | 2       | 106 | 3.89   | .503           | .049            |
| MeanESEO         | 1       | 78  | 3.79   | .545           | .062            |
|                  | 2       | 106 | 3.83   | .491           | .048            |
| MeanBP           | 1       | 78  | 3.60   | .645           | .073            |
|                  | 2       | 106 | 3.67   | .620           | .060            |
| MeanRAGAP        | 1       | 78  | 3.3105 | .76423         | .08653          |
|                  | 2       | 106 | 3.3679 | .68000         | .06605          |

Note: significant at  $p < 0.05$ ,  $t > \pm 1.96$ ; there is no response bias as the p-value is not significant at  $p < 0.05$

| Independent Samples Test |                             |   |      |       |         |                              |                 |                       |   |        |
|--------------------------|-----------------------------|---|------|-------|---------|------------------------------|-----------------|-----------------------|---|--------|
|                          |                             | Levene's Test for Equality of Variances |      |       |         | t-test for Equality of Means |                 |                       |   |        |
|                          |                             | F                                       | Sig. | t     | df      | Sig. (2-tailed)              | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |        |
|                          |                             |   |      |       |         |                              |                 |                       | Lower                                     | Upper  |
| MeanRAOSN                | Equal variances assumed     | 2.669                                   | .104 | -.690 | 182     | .491                         | -.060           | .086                  | -.230                                     | .111   |
|                          | Equal variances not assumed |   |      | -.668 | 143.532 | .505                         | -.060           | .089                  | -.236                                     | .117   |
| MeanESEB                 | Equal variances assumed     | 1.599                                   | .208 | .910  | 182     | .364                         | .065            | .072                  | -.076                                     | .207   |
|                          | Equal variances not assumed |   |      | .926  | 175.358 | .356                         | .065            | .070                  | -.074                                     | .204   |
| MeanESEO                 | Equal variances assumed     | 1.272                                   | .261 | -.558 | 182     | .578                         | -.043           | .077                  | -.194                                     | .109   |
|                          | Equal variances not assumed |   |      | -.549 | 155.795 | .584                         | -.043           | .078                  | -.197                                     | .111   |
| MeanBP                   | Equal variances assumed     | .185                                    | .668 | -.709 | 182     | .479                         | -.067           | .094                  | -.252                                     | .119   |
|                          | Equal variances not assumed |   |      | -.704 | 162.172 | .482                         | -.067           | .095                  | -.254                                     | .120   |
| MeanRAGAP                | Equal variances assumed     | 2.379                                   | .125 | -.537 | 182     | .592                         | -.05738         | .10694                | -.26838                                   | .15362 |
|                          | Equal variances not assumed |   |      | -.527 | 154.418 | .599                         | -.05738         | .10886                | -.27243                                   | .15766 |

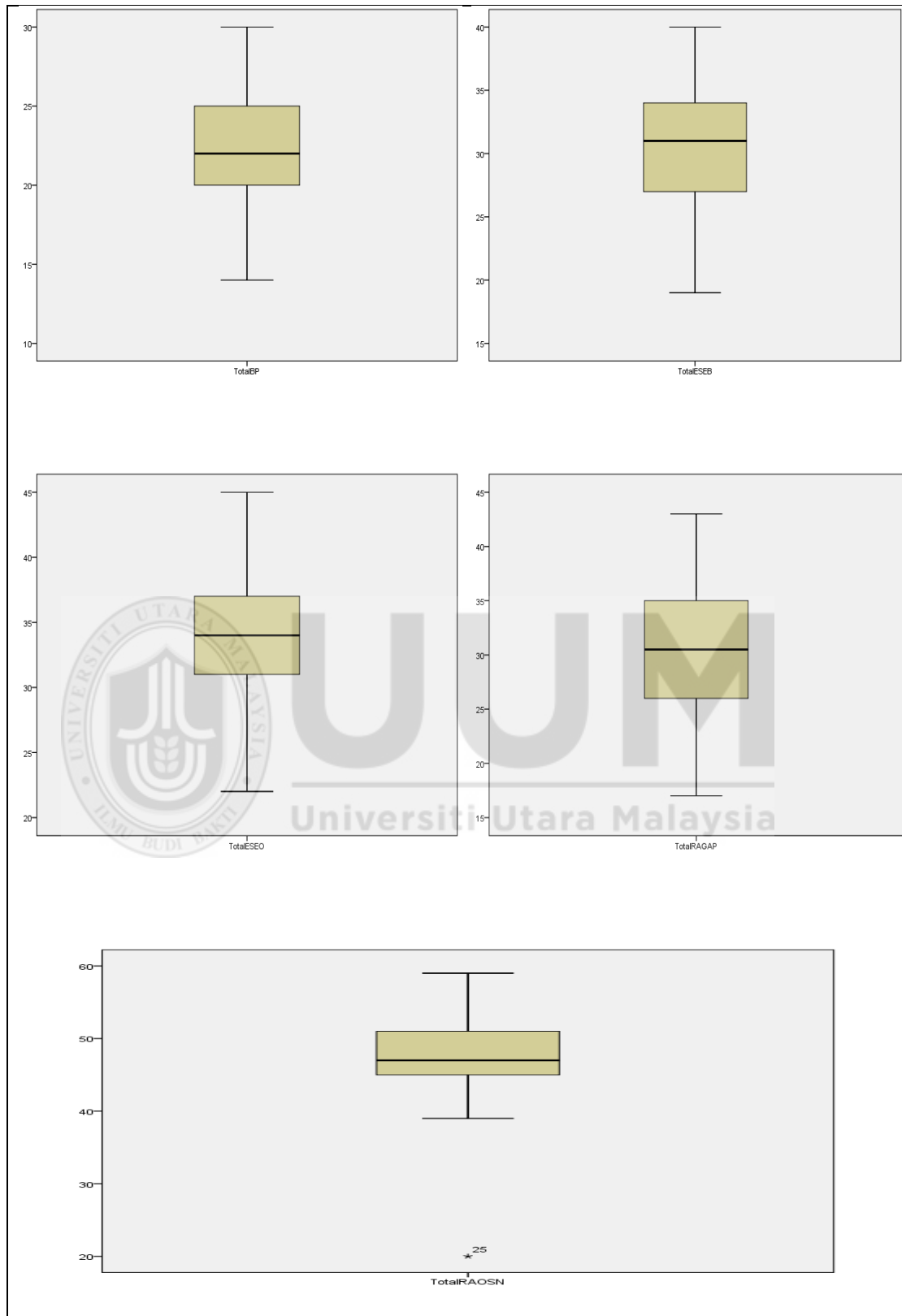
## MISSING DATA ANALYSIS

Case Processing Summary

|         | Cases |         |         |         |       |         |
|---------|-------|---------|---------|---------|-------|---------|
|         | Valid |         | Missing |         | Total |         |
|         | N     | Percent | N       | Percent | N     | Percent |
| RAGAP1  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAGAP2  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAGAP3  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAGAP4  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAGAP5  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAGAP6  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAGAP7  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAGAP8  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAGAP9  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAOSN1  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAOSN2  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAOSN3  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAOSN4  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAOSN5  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAOSN6  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAOSN7  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAOSN8  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAOSN9  | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAOSN10 | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAOSN11 | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| RAOSN12 | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEB1   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEB2   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEB3   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEB4   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEB5   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEB6   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEB7   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEB8   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEO1   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEO2   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEO3   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEO4   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEO5   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEO6   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEO7   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEO8   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| ESEO9   | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| BP1     | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| BP2     | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| BP3     | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| BP4     | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| BP5     | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |
| BP6     | 184   | 100.0%  | 0       | 0.0%    | 184   | 100.0%  |

Note: If N=0, there is missing data while if N=1, there is missing data. No missing data detected in this dataset.

## OUTLIERS ANALYSIS



*Note.* Boxplots in identifying multivariate outliers. Case 25 identified as unusual multivariate outlier.

**Extreme Values**

|                   |         | Case Number | Value                 |
|-------------------|---------|-------------|-----------------------|
| Zscore(MeanBP)    | Highest | 1           | 2.23565               |
|                   |         | 2           | 1.95312               |
|                   |         | 3           | 1.95312               |
|                   |         | 4           | 1.95312               |
|                   |         | 5           | 1.67060 <sup>a</sup>  |
|                   | Lowest  | 1           | -2.28479              |
|                   |         | 2           | -2.00226              |
|                   |         | 3           | -2.00226              |
|                   |         | 4           | -2.00226              |
|                   |         | 5           | -2.00226 <sup>b</sup> |
| Zscore(MeanESEB)  | Highest | 1           | 2.07357               |
|                   |         | 2           | 1.85703               |
|                   |         | 3           | 1.85703               |
|                   |         | 4           | 1.64049               |
|                   |         | 5           | 1.64049 <sup>c</sup>  |
|                   | Lowest  | 1           | -2.47369              |
|                   |         | 2           | -2.25715              |
|                   |         | 3           | -2.25715              |
|                   |         | 4           | -2.25715              |
|                   |         | 5           | -1.82408 <sup>d</sup> |
| Zscore(MeanESEO)  | Highest | 1           | 2.39865               |
|                   |         | 2           | 1.96124               |
|                   |         | 3           | 1.96124               |
|                   |         | 4           | 1.96124               |
|                   |         | 5           | 1.74253 <sup>e</sup>  |
|                   | Lowest  | 1           | -2.63162              |
|                   |         | 2           | -2.41292              |
|                   |         | 3           | -2.41292              |
|                   |         | 4           | -2.19421              |
|                   |         | 5           | -1.97550 <sup>f</sup> |
| Zscore(MeanRAGAP) | Highest | 1           | 1.88753               |
|                   |         | 2           | 1.88753               |
|                   |         | 3           | 1.88753               |
|                   |         | 4           | 1.88753               |
|                   |         | 5           | 1.73974               |
|                   | Lowest  | 1           | -1.95500              |
|                   |         | 2           | -1.95500              |
|                   |         | 3           | -1.95500              |
|                   |         | 4           | -1.95500              |
|                   |         | 5           | -1.80721 <sup>g</sup> |
| Zscore(MeanRAOSN) | Highest | 1           | 2.30824               |
|                   |         | 2           | 2.30824               |
|                   |         | 3           | 2.30824               |
|                   |         | 4           | 2.10167               |
|                   |         | 5           | 2.10167 <sup>h</sup>  |
|                   | Lowest  | 1           | -5.74815              |
|                   |         | 2           | -1.82324              |
|                   |         | 3           | -1.61667              |
|                   |         | 4           | -1.61667              |
|                   |         | 5           | -1.41009 <sup>i</sup> |

*Note.* Delete the case with higher extreme value ( $> -3.0$ ). the case 25 is deleted as it shows unusual multivariate outlier.

| Extreme Values    |         |   | Case Number | Value                 |
|-------------------|---------|---|-------------|-----------------------|
| Zscore(MeanBP)    | Highest | 1 | 75          | 2.22844               |
|                   |         | 2 | 79          | 1.94661               |
|                   |         | 3 | 129         | 1.94661               |
|                   |         | 4 | 173         | 1.94661               |
|                   |         | 5 | 8           | 1.66478 <sup>a</sup>  |
|                   | Lowest  | 1 | 97          | -2.28080              |
|                   |         | 2 | 143         | -1.99897              |
|                   |         | 3 | 131         | -1.99897              |
|                   |         | 4 | 125         | -1.99897              |
|                   |         | 5 | 124         | -1.99897 <sup>b</sup> |
| Zscore(MeanESEB)  | Highest | 1 | 72          | 2.07135               |
|                   |         | 2 | 139         | 1.85425               |
|                   |         | 3 | 179         | 1.85425               |
|                   |         | 4 | 61          | 1.63715               |
|                   |         | 5 | 77          | 1.63715 <sup>c</sup>  |
|                   | Lowest  | 1 | 11          | -2.48776              |
|                   |         | 2 | 90          | -2.27066              |
|                   |         | 3 | 84          | -2.27066              |
|                   |         | 4 | 10          | -2.27066              |
|                   |         | 5 | 94          | -1.83646 <sup>d</sup> |
| Zscore(MeanESEO)  | Highest | 1 | 80          | 2.39205               |
|                   |         | 2 | 19          | 1.95583               |
|                   |         | 3 | 26          | 1.95583               |
|                   |         | 4 | 30          | 1.95583               |
|                   |         | 5 | 21          | 1.73772 <sup>e</sup>  |
|                   | Lowest  | 1 | 71          | -2.62446              |
|                   |         | 2 | 178         | -2.40635              |
|                   |         | 3 | 112         | -2.40635              |
|                   |         | 4 | 118         | -2.18825              |
|                   |         | 5 | 98          | -1.97014 <sup>f</sup> |
| Zscore(MeanRAGAP) | Highest | 1 | 30          | 1.90116               |
|                   |         | 2 | 51          | 1.90116               |
|                   |         | 3 | 101         | 1.90116               |
|                   |         | 4 | 146         | 1.90116               |
|                   |         | 5 | 83          | 1.75293               |
|                   | Lowest  | 1 | 150         | -1.95301              |
|                   |         | 2 | 107         | -1.95301              |
|                   |         | 3 | 64          | -1.95301              |
|                   |         | 4 | 58          | -1.95301              |
|                   |         | 5 | 172         | -1.80477 <sup>g</sup> |
| Zscore(MeanRAOSN) | Highest | 1 | 91          | 2.50982               |
|                   |         | 2 | 101         | 2.50982               |
|                   |         | 3 | 117         | 2.50982               |
|                   |         | 4 | 82          | 2.28211               |
|                   |         | 5 | 118         | 2.28211 <sup>h</sup>  |
|                   | Lowest  | 1 | 48          | -2.04444              |
|                   |         | 2 | 43          | -1.81673              |
|                   |         | 3 | 8           | -1.81673              |
|                   |         | 4 | 183         | -1.58901              |
|                   |         | 5 | 70          | -1.58901 <sup>i</sup> |

*Note.* Result of multivariate outliers after deleting case 25.



## FACTOR ANALYSIS

### NASCENT VENTURE BUSINESS PERFORMANCE (NVP)

#### KMO and Bartlett's Test

|  |                    |
|--|--------------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .849               |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square |
|  | df                 |
|  | Sig.               |
|  | 312.090            |
|  | 15                 |
|  | .000               |

#### Anti-image Matrices

|                        |       | NVP 1             | NVP 2             | NVP 3             | NVP 4             | NVP 5             | NVP 6             |
|------------------------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Anti-image Covariance  | NVP 1 | .650              | -.093             | -.087             | -.212             | -.077             | -.057             |
|                        | NVP 2 | -.093             | .644              | -.126             | -.023             | -.112             | -.136             |
|                        | NVP 3 | -.087             | -.126             | .607              | .026              | -.168             | -.148             |
|                        | NVP 4 | -.212             | -.023             | .026              | .703              | -.097             | -.128             |
|                        | NVP 5 | -.077             | -.112             | -.168             | -.097             | .623              | -.076             |
|                        | NVP 6 | -.057             | -.136             | -.148             | -.128             | -.076             | .614              |
| Anti-image Correlation | NVP 1 | .848 <sup>a</sup> | -.143             | -.139             | -.314             | -.121             | -.090             |
|                        | NVP 2 | -.143             | .869 <sup>a</sup> | -.202             | -.034             | -.177             | -.216             |
|                        | NVP 3 | -.139             | -.202             | .834 <sup>a</sup> | .040              | -.273             | -.242             |
|                        | NVP 4 | -.314             | -.034             | .040              | .817 <sup>a</sup> | -.146             | -.195             |
|                        | NVP 5 | -.121             | -.177             | -.273             | -.146             | .863 <sup>a</sup> | -.123             |
|                        | NVP 6 | -.090             | -.216             | -.242             | -.195             | -.123             | .858 <sup>a</sup> |

a. Measures of Sampling Adequacy(MSA)

**Communalities**

|       | Initial | Extraction |
|-------|---------|------------|
| NVP 1 | 1.000   | .513       |
| NVP 2 | 1.000   | .530       |
| NVP 3 | 1.000   | .548       |
| NVP 4 | 1.000   | .416       |
| NVP 5 | 1.000   | .557       |
| NVP 6 | 1.000   | .567       |

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

| Component | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % |
| 1         | 3.130               | 52.173        | 52.173       | 3.130                               | 52.173        | 52.173       |
| 2         | .806                | 13.431        | 65.604       |                                     |               |              |
| 3         | .565                | 9.417         | 75.021       |                                     |               |              |
| 4         | .550                | 9.165         | 84.186       |                                     |               |              |
| 5         | .514                | 8.565         | 92.751       |                                     |               |              |
| 6         | .435                | 7.249         | 100.000      |                                     |               |              |

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

|       | Component |
|-------|-----------|
|       | 1         |
| NVP 1 | .716      |
| NVP 2 | .728      |
| NVP 3 | .740      |
| NVP 4 | .645      |
| NVP 5 | .746      |
| NVP 6 | .753      |

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

**Rotated Component Matrix<sup>a</sup>**

|  |
|--|
|  |
|--|

a. Only one component was extracted. The solution cannot be rotated.

## ENTREPRENEURIAL STRATEGY OF ENTREPRENEURIAL BRICOLAGE (ESEB)

**KMO and Bartlett's Test**

|  |                    |
|--|--------------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .805               |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square |
|  | 369.731            |
|  | df                 |
|  | 28                 |
|  | Sig.               |
|  | .000               |

### Anti-image Matrices

|                        |        | ESEB1             | ESEB2             | ESEB3             | ESEB4             | ESEB5             | ESEB6             | ESEB7             | ESEB8             |
|------------------------|--------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Anti-image Covariance  | ESEB 1 | .638              | -.104             | -.165             | .022              | .074              | -.107             | -.153             | -.030             |
|                        | ESEB 2 | -.104             | .611              | -.060             | -.227             | .017              | -.048             | -.094             | -.102             |
|                        | ESEB 3 | -.165             | -.060             | .505              | -.111             | -.061             | -.159             | -.058             | -.113             |
|                        | ESEB 4 | .022              | -.227             | -.111             | .628              | -.192             | .017              | .055              | .006              |
|                        | ESEB 5 | .074              | .017              | -.061             | -.192             | .711              | -.173             | -.055             | -.046             |
|                        | ESEB 6 | -.107             | -.048             | -.159             | .017              | -.173             | .608              | -.059             | -.022             |
|                        | ESEB 7 | -.153             | -.094             | -.058             | .055              | -.055             | -.059             | .798              | .157              |
|                        | ESEB 8 | -.030             | -.102             | -.113             | .006              | -.046             | -.022             | .157              | .851              |
| Anti-image Correlation | ESEB 1 | .808 <sup>a</sup> | -.167             | -.290             | .036              | .110              | -.172             | -.215             | -.041             |
|                        | ESEB 2 | -.167             | .820 <sup>a</sup> | -.108             | -.366             | .026              | -.079             | -.135             | -.142             |
|                        | ESEB 3 | -.290             | -.108             | .830 <sup>a</sup> | -.198             | -.102             | -.287             | -.092             | -.173             |
|                        | ESEB 4 | .036              | -.366             | -.198             | .759 <sup>a</sup> | -.288             | .028              | .078              | .008              |
|                        | ESEB 5 | .110              | .026              | -.102             | -.288             | .781 <sup>a</sup> | -.264             | -.073             | -.059             |
|                        | ESEB 6 | -.172             | -.079             | -.287             | .028              | -.264             | .838 <sup>a</sup> | -.085             | -.030             |
|                        | ESEB 7 | -.215             | -.135             | -.092             | .078              | -.073             | -.085             | .768 <sup>a</sup> | .190              |
|                        | ESEB 8 | -.041             | -.142             | -.173             | .008              | -.059             | -.030             | .190              | .774 <sup>a</sup> |

a. Measures of Sampling Adequacy(MSA)

### Communalities

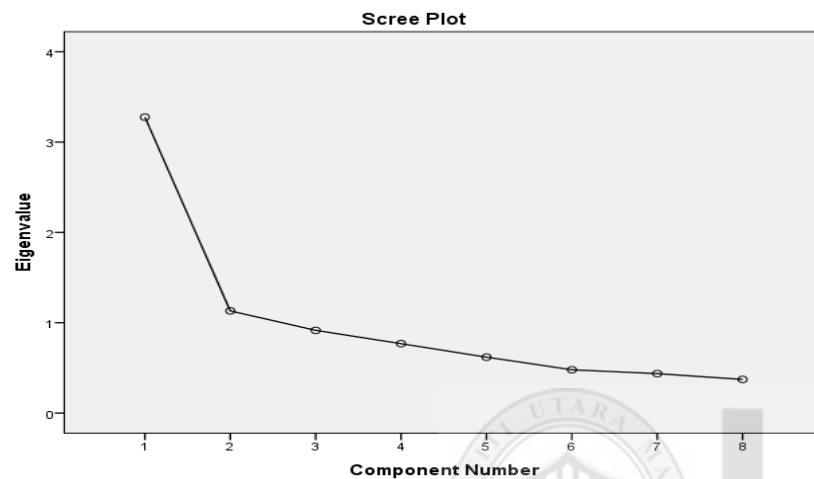
|       | Initial | Extraction |
|-------|---------|------------|
| ESEB1 | 1.000   | .580       |
| ESEB2 | 1.000   | .521       |
| ESEB3 | 1.000   | .655       |
| ESEB4 | 1.000   | .543       |
| ESEB5 | 1.000   | .418       |
| ESEB6 | 1.000   | .537       |
| ESEB7 | 1.000   | .688       |
| ESEB8 | 1.000   | .466       |

Extraction Method: Principal Component Analysis.

### Total Variance Explained

| Component | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              | Rotation Sums of Squared Loadings |               |              |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % | Total                             | % of Variance | Cumulative % |
| 1         | 3.276               | 40.954        | 40.954       | 3.276                               | 40.954        | 40.954       | 2.309                             | 28.858        | 28.858       |
| 2         | 1.131               | 14.138        | 55.092       | 1.131                               | 14.138        | 55.092       | 2.099                             | 26.234        | 55.092       |
| 3         | .916                | 11.448        | 66.539       |                                     |               |              |                                   |               |              |
| 4         | .769                | 9.610         | 76.149       |                                     |               |              |                                   |               |              |
| 5         | .619                | 7.743         | 83.892       |                                     |               |              |                                   |               |              |
| 6         | .479                | 5.993         | 89.886       |                                     |               |              |                                   |               |              |
| 7         | .437                | 5.462         | 95.348       |                                     |               |              |                                   |               |              |
| 8         | .372                | 4.652         | 100.000      |                                     |               |              |                                   |               |              |

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

|       | Component |       |
|-------|-----------|-------|
|       | 1         | 2     |
| ESEB1 | .660      |       |
| ESEB2 | .718      |       |
| ESEB3 | .809      |       |
| ESEB4 | .650      |       |
| ESEB5 | .588      |       |
| ESEB6 | .726      |       |
| ESEB7 |           | -.691 |
| ESEB8 |           | .549  |

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

|       | Component |      |
|-------|-----------|------|
|       | 1         | 2    |
| ESEB1 |           | .725 |
| ESEB2 | .577      |      |
| ESEB3 | .587      | .557 |
| ESEB4 | .714      |      |
| ESEB5 | .616      |      |
| ESEB6 |           | .560 |
| ESEB7 |           | .820 |
| ESEB8 | .670      |      |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

| Component | 1    | 2     |
|-----------|------|-------|
| 1         | .741 | .672  |
| 2         | .672 | -.741 |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

## ESEB DELETING ESEB7, ESEB8

### KMO and Bartlett's Test

|  |                    |         |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .789    |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 308.463 |
|  | df                 | 15      |
|  | Sig.               | .000    |

### Anti-image Matrices

|                        |       | ESEB1             | ESEB2             | ESEB3             | ESEB4             | ESEB5             | ESEB6             |
|------------------------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Anti-image Covariance  | ESEB1 | .669              | -.132             | -.191             | .035              | .067              | -.125             |
|                        | ESEB2 | -.132             | .631              | -.083             | -.229             | .007              | -.058             |
|                        | ESEB3 | -.191             | -.083             | .522              | -.112             | -.072             | -.172             |
|                        | ESEB4 | .035              | -.229             | -.112             | .632              | -.191             | .022              |
|                        | ESEB5 | .067              | .007              | -.072             | -.191             | .716              | -.180             |
|                        | ESEB6 | -.125             | -.058             | -.172             | .022              | -.180             | .612              |
| Anti-image Correlation | ESEB1 | .779 <sup>a</sup> | -.204             | -.323             | .054              | .097              | -.195             |
|                        | ESEB2 | -.204             | .807 <sup>a</sup> | -.144             | -.363             | .011              | -.094             |
|                        | ESEB3 | -.323             | -.144             | .806 <sup>a</sup> | -.196             | -.118             | -.303             |
|                        | ESEB4 | .054              | -.363             | -.196             | .752 <sup>a</sup> | -.284             | .035              |
|                        | ESEB5 | .097              | .011              | -.118             | -.284             | .770 <sup>a</sup> | -.272             |
|                        | ESEB6 | -.195             | -.094             | -.303             | .035              | -.272             | .805 <sup>a</sup> |

a. Measures of Sampling Adequacy(MSA)

### Communalities

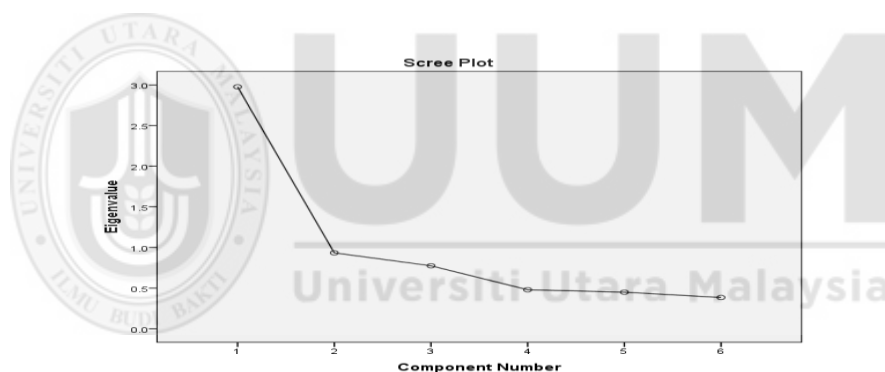
|       | Initial | Extraction |
|-------|---------|------------|
| ESEB1 | 1.000   | .419       |
| ESEB2 | 1.000   | .521       |
| ESEB3 | 1.000   | .657       |
| ESEB4 | 1.000   | .469       |
| ESEB5 | 1.000   | .371       |
| ESEB6 | 1.000   | .540       |

Extraction Method: Principal Component Analysis.

### Total Variance Explained

| Component | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % |
| 1         | 2.977               | 49.616        | 49.616       | 2.977                               | 49.616        | 49.616       |
| 2         | .934                | 15.568        | 65.184       |                                     |               |              |
| 3         | .775                | 12.914        | 78.098       |                                     |               |              |
| 4         | .480                | 7.999         | 86.098       |                                     |               |              |
| 5         | .450                | 7.498         | 93.596       |                                     |               |              |
| 6         | .384                | 6.404         | 100.000      |                                     |               |              |

Extraction Method: Principal Component Analysis.



### Component Matrix<sup>a</sup>

|       | Component |
|-------|-----------|
|       | 1         |
| ESEB1 | .648      |
| ESEB2 | .722      |
| ESEB3 | .811      |
| ESEB4 | .685      |
| ESEB5 | .609      |
| ESEB6 | .735      |

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

### Rotated Component

#### Matrix<sup>a</sup>

a. Only one component was extracted. The solution cannot be rotated.

## ENTREPRENEURIAL STRATEGY OF ENTREPRENEURIAL ORIENTATION (ESEO)

### KMO and Bartlett's Test

|  |         |
|--|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .708    |
| Bartlett's Test of Sphericity                    | 572.031 |
| df   | 36      |
| Sig.   | .000    |

### Anti-image Matrices

|                        |       | ESEO1             | ESEO2             | ESEO3             | ESEO4             | ESEO5             | ESEO6             | ESEO7             | ESEO8             | ESEO9             |
|------------------------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Anti-image Covariance  | ESEO1 | .494              | -.282             | -.228             | .002              | .027              | -.035             | .038              | -.004             | .076              |
|                        | ESEO2 | -.282             | .551              | -.047             | -.001             | -.011             | -.096             | -.010             | -.018             | -.029             |
|                        | ESEO3 | -.228             | -.047             | .670              | -.065             | .004              | .088              | -.027             | -.024             | -.084             |
|                        | ESEO4 | .002              | -.001             | -.065             | .505              | -.286             | -.113             | -.030             | .054              | -.055             |
|                        | ESEO5 | .027              | -.011             | .004              | -.286             | .509              | -.145             | .009              | -.004             | -.002             |
|                        | ESEO6 | -.035             | -.096             | .088              | -.113             | -.145             | .635              | -.069             | -.074             | .024              |
|                        | ESEO7 | .038              | -.010             | -.027             | -.030             | .009              | -.069             | .570              | -.191             | -.106             |
|                        | ESEO8 | -.004             | -.018             | -.024             | .054              | -.004             | -.074             | -.191             | .448              | -.232             |
|                        | ESEO9 | .076              | -.029             | -.084             | -.055             | -.002             | .024              | -.106             | -.232             | .494              |
| Anti-image Correlation | ESEO1 | .582 <sup>a</sup> | -.541             | -.397             | .004              | .053              | -.063             | .071              | -.010             | .154              |
|                        | ESEO2 | -.541             | .690 <sup>a</sup> | -.077             | -.002             | -.020             | -.162             | -.017             | -.037             | -.056             |
|                        | ESEO3 | -.397             | -.077             | .718 <sup>a</sup> | -.112             | .006              | .135              | -.044             | -.043             | -.147             |
|                        | ESEO4 | .004              | -.002             | -.112             | .678 <sup>a</sup> | -.565             | -.199             | -.056             | .114              | -.110             |
|                        | ESEO5 | .053              | -.020             | .006              | -.565             | .675 <sup>a</sup> | -.255             | .016              | -.009             | -.004             |
|                        | ESEO6 | -.063             | -.162             | .135              | -.199             | -.255             | .806 <sup>a</sup> | -.114             | -.140             | .042              |
|                        | ESEO7 | .071              | -.017             | -.044             | -.056             | .016              | -.114             | .810 <sup>a</sup> | -.377             | -.199             |
|                        | ESEO8 | -.010             | -.037             | -.043             | .114              | -.009             | -.140             | -.377             | .707 <sup>a</sup> | -.493             |
|                        | ESEO9 | .154              | -.056             | -.147             | -.110             | -.004             | .042              | -.199             | -.493             | .732 <sup>a</sup> |

a. Measures of Sampling Adequacy(MSA)

**Total Variance Explained**

| Component | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              | Rotation Sums of Squared Loadings |               |              |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % | Total                             | % of Variance | Cumulative % |
| 1         | 3.051               | 33.896        | 33.896       | 3.051                               | 33.896        | 33.896       | 2.274                             | 25.269        | 25.269       |
| 2         | 1.820               | 20.224        | 54.120       | 1.820                               | 20.224        | 54.120       | 2.104                             | 23.375        | 48.644       |
| 3         | 1.540               | 17.115        | 71.235       | 1.540                               | 17.115        | 71.235       | 2.033                             | 22.591        | 71.235       |
| 4         | .729                | 8.105         | 79.341       |                                     |               |              |                                   |               |              |
| 5         | .473                | 5.254         | 84.594       |                                     |               |              |                                   |               |              |
| 6         | .441                | 4.899         | 89.494       |                                     |               |              |                                   |               |              |
| 7         | .342                | 3.804         | 93.298       |                                     |               |              |                                   |               |              |
| 8         | .322                | 3.575         | 96.873       |                                     |               |              |                                   |               |              |
| 9         | .281                | 3.127         | 100.000      |                                     |               |              |                                   |               |              |

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

|       | Component |      |       |
|-------|-----------|------|-------|
|       | 1         | 2    | 3     |
| ESEO1 |           | .818 |       |
| ESEO2 | .510      | .649 |       |
| ESEO3 |           | .515 |       |
| ESEO4 | .617      |      | -.607 |
| ESEO5 | .584      |      | -.660 |
| ESEO6 | .650      |      |       |
| ESEO7 | .649      |      |       |
| ESEO8 | .677      |      |       |
| ESEO9 | .657      |      |       |

Extraction Method: Principal Component Analysis.

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

|       | Component |      |      |
|-------|-----------|------|------|
|       | 1         | 2    | 3    |
| ESEO1 |           |      | .893 |
| ESEO2 |           |      | .813 |
| ESEO3 |           |      | .728 |
| ESEO4 |           | .858 |      |
| ESEO5 |           | .882 |      |
| ESEO6 |           | .713 |      |
| ESEO7 | .812      |      |      |
| ESEO8 | .879      |      |      |
| ESEO9 | .848      |      |      |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

| Component | 1     | 2     | 3    |
|-----------|-------|-------|------|
| 1         | .661  | .610  | .437 |
| 2         | -.515 | -.055 | .856 |
| 3         | .546  | -.790 | .278 |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.



## RESOURCE ACQUISITION GOVERNMENT ASSISTANCE PROGRAM (RAGAP)

### KMO and Bartlett's Test

|  |                    |
|--|--------------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .898               |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square |
|  | 921.360            |
|  | df                 |
|  | 36                 |
|  | Sig.               |
|  | .000               |

### Anti-image Matrices

|                        |        | RAGAP1            | RAGAP2            | RAGAP3            | RAGAP4            | RAGAP5            | RAGAP6            | RAGAP7            | RAGAP8            | RAGAP9            |
|------------------------|--------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Anti-image Covariance  | RAGAP1 | .716              | -.140             | .068              | -.022             | .043              | -.075             | -.012             | -.177             | .040              |
|                        | RAGAP2 | -.140             | .411              | -.061             | -.055             | -.027             | -.088             | -.036             | -.078             | .006              |
|                        | RAGAP3 | .068              | -.061             | .452              | -.118             | -.076             | .006              | -.096             | -.076             | .046              |
|                        | RAGAP4 | -.022             | -.055             | -.118             | .362              | -.070             | -.097             | -.005             | .071              | -.032             |
|                        | RAGAP5 | .043              | -.027             | -.076             | -.070             | .336              | -.074             | -.053             | -.028             | -.095             |
|                        | RAGAP6 | -.075             | -.088             | .006              | -.097             | -.074             | .324              | -.078             | .063              | -.042             |
|                        | RAGAP7 | -.012             | -.036             | -.096             | -.005             | -.053             | -.078             | .406              | .018              | -.105             |
|                        | RAGAP8 | -.177             | -.078             | -.076             | .071              | -.028             | .063              | .018              | .632              | -.205             |
|                        | RAGAP9 | .040              | .006              | .046              | -.032             | -.095             | -.042             | -.105             | -.205             | .449              |
| Anti-image Correlation | RAGAP1 | .809 <sup>a</sup> | -.257             | .120              | -.043             | .088              | -.156             | -.023             | -.264             | .071              |
|                        | RAGAP2 | -.257             | .925 <sup>a</sup> | -.142             | -.144             | -.074             | -.242             | -.088             | -.154             | .013              |
|                        | RAGAP3 | .120              | -.142             | .902 <sup>a</sup> | -.291             | -.195             | .016              | -.224             | -.143             | .103              |
|                        | RAGAP4 | -.043             | -.144             | -.291             | .910 <sup>a</sup> | -.199             | -.282             | -.014             | .148              | -.080             |
|                        | RAGAP5 | .088              | -.074             | -.195             | -.199             | .925 <sup>a</sup> | -.225             | -.143             | -.060             | -.245             |
|                        | RAGAP6 | -.156             | -.242             | .016              | -.282             | -.225             | .905 <sup>a</sup> | -.215             | .140              | -.109             |
|                        | RAGAP7 | -.023             | -.088             | -.224             | -.014             | -.143             | -.215             | .931 <sup>a</sup> | .035              | -.245             |
|                        | RAGAP8 | -.264             | -.154             | -.143             | .148              | -.060             | .140              | .035              | .765 <sup>a</sup> | -.385             |
|                        | RAGAP9 | .071              | .013              | .103              | -.080             | -.245             | -.109             | -.245             | -.385             | .875 <sup>a</sup> |

a. Measures of Sampling Adequacy(MSA)

**Communalities**

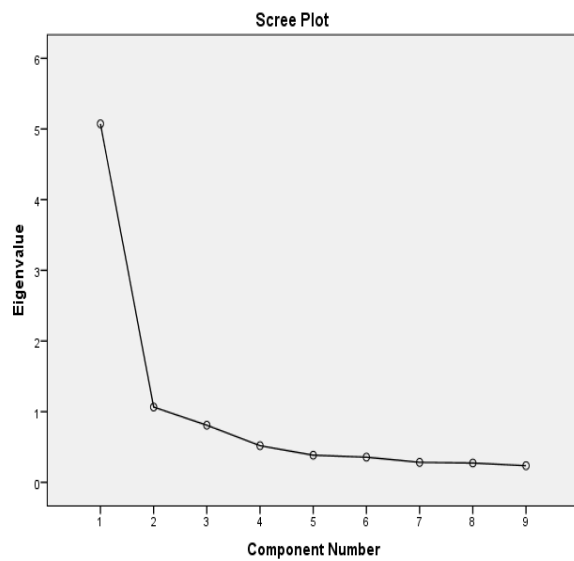
|        | Initial | Extraction |
|--------|---------|------------|
| RAGAP1 | 1.000   | .636       |
| RAGAP2 | 1.000   | .670       |
| RAGAP3 | 1.000   | .646       |
| RAGAP4 | 1.000   | .741       |
| RAGAP5 | 1.000   | .758       |
| RAGAP6 | 1.000   | .739       |
| RAGAP7 | 1.000   | .691       |
| RAGAP8 | 1.000   | .681       |
| RAGAP9 | 1.000   | .578       |

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

| Compon<br>ent | Initial Eigenvalues |                  |                  | Extraction Sums of Squared |                  |                  | Rotation Sums of Squared |                  |                  |
|---------------|---------------------|------------------|------------------|----------------------------|------------------|------------------|--------------------------|------------------|------------------|
|               |                     |                  |                  | Loadings                   |                  |                  | Loadings                 |                  |                  |
|               | Total               | % of<br>Variance | Cumulativ<br>e % | Total                      | % of<br>Variance | Cumulativ<br>e % | Total                    | % of<br>Variance | Cumulativ<br>e % |
| 1             | 5.073               | 56.370           | 56.370           | 5.073                      | 56.370           | 56.370           | 4.331                    | 48.124           | 48.124           |
| 2             | 1.066               | 11.842           | 68.212           | 1.066                      | 11.842           | 68.212           | 1.808                    | 20.088           | 68.212           |
| 3             | .808                | 8.983            | 77.195           |                            |                  |                  |                          |                  |                  |
| 4             | .519                | 5.769            | 82.964           |                            |                  |                  |                          |                  |                  |
| 5             | .384                | 4.270            | 87.234           |                            |                  |                  |                          |                  |                  |
| 6             | .357                | 3.965            | 91.199           |                            |                  |                  |                          |                  |                  |
| 7             | .283                | 3.144            | 94.343           |                            |                  |                  |                          |                  |                  |
| 8             | .273                | 3.036            | 97.379           |                            |                  |                  |                          |                  |                  |
| 9             | .236                | 2.621            | 100.000          |                            |                  |                  |                          |                  |                  |

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

|        | Component |      |
|--------|-----------|------|
|        | 1         | 2    |
| RAGAP1 |           | .648 |
| RAGAP2 | .812      |      |
| RAGAP3 | .766      |      |
| RAGAP4 | .818      |      |
| RAGAP5 | .851      |      |
| RAGAP6 | .848      |      |
| RAGAP7 | .818      |      |
| RAGAP8 | .515      | .645 |
| RAGAP9 | .752      |      |

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

|        | Component |      |
|--------|-----------|------|
|        | 1         | 2    |
| RAGAP1 |           | .785 |
| RAGAP2 | .688      |      |
| RAGAP3 | .796      |      |
| RAGAP4 | .853      |      |
| RAGAP5 | .847      |      |
| RAGAP6 | .827      |      |
| RAGAP7 | .801      |      |
| RAGAP8 |           | .804 |
| RAGAP9 | .630      |      |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

| Component | 1     | 2    |
|-----------|-------|------|
| 1         | .903  | .430 |
| 2         | -.430 | .903 |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

## RAGAP DELETING RAGAP1, RAGAP8

### KMO and Bartlett's Test

|  |                    |
|--|--------------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .918               |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square |
|  | df                 |
|  | Sig.               |
|  | 795.961            |
|  | 21                 |
|  | .000               |

### Anti-image Matrices

|                        |        | RAGAP2            | RAGAP3            | RAGAP4            | RAGAP5            | RAGAP6            | RAGAP7            | RAGAP9            |
|------------------------|--------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Anti-image Covariance  | RAGAP2 | .466              | -.069             | -.055             | -.025             | -.111             | -.040             | -.032             |
|                        | RAGAP3 | -.069             | .465              | -.115             | -.085             | .019              | -.096             | .028              |
|                        | RAGAP4 | -.055             | -.115             | .371              | -.068             | -.110             | -.008             | -.011             |
|                        | RAGAP5 | -.025             | -.085             | -.068             | .339              | -.072             | -.052             | -.123             |
|                        | RAGAP6 | -.111             | .019              | -.110             | -.072             | .335              | -.083             | -.027             |
|                        | RAGAP7 | -.040             | -.096             | -.008             | -.052             | -.083             | .407              | -.117             |
|                        | RAGAP9 | -.032             | .028              | -.011             | -.123             | -.027             | -.117             | .528              |
| Anti-image Correlation | RAGAP2 | .941 <sup>a</sup> | -.149             | -.132             | -.064             | -.280             | -.093             | -.065             |
|                        | RAGAP3 | -.149             | .912 <sup>a</sup> | -.277             | -.214             | .048              | -.221             | .056              |
|                        | RAGAP4 | -.132             | -.277             | .914 <sup>a</sup> | -.193             | -.312             | -.020             | -.025             |
|                        | RAGAP5 | -.064             | -.214             | -.193             | .917 <sup>a</sup> | -.212             | -.141             | -.290             |
|                        | RAGAP6 | -.280             | .048              | -.312             | -.212             | .902 <sup>a</sup> | -.226             | -.065             |
|                        | RAGAP7 | -.093             | -.221             | -.020             | -.141             | -.226             | .925 <sup>a</sup> | -.252             |
|                        | RAGAP9 | -.065             | .056              | -.025             | -.290             | -.065             | -.252             | .919 <sup>a</sup> |

a. Measures of Sampling Adequacy(MSA)

### Communalities

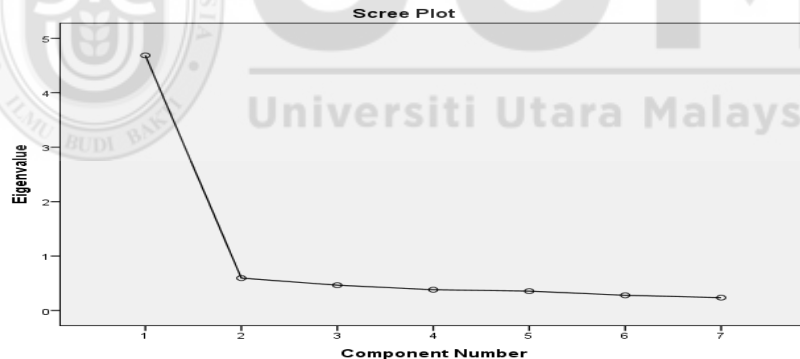
|        | Initial | Extraction |
|--------|---------|------------|
| RAGAP2 | 1.000   | .635       |
| RAGAP3 | 1.000   | .614       |
| RAGAP4 | 1.000   | .709       |
| RAGAP5 | 1.000   | .752       |
| RAGAP6 | 1.000   | .740       |
| RAGAP7 | 1.000   | .691       |
| RAGAP9 | 1.000   | .546       |

Extraction Method: Principal Component Analysis.

### Total Variance Explained

| Component | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % |
| 1         | 4.685               | 66.934        | 66.934       | 4.685                               | 66.934        | 66.934       |
| 2         | .595                | 8.504         | 75.438       |                                     |               |              |
| 3         | .465                | 6.648         | 82.086       |                                     |               |              |
| 4         | .382                | 5.451         | 87.537       |                                     |               |              |
| 5         | .356                | 5.088         | 92.626       |                                     |               |              |
| 6         | .280                | 3.999         | 96.624       |                                     |               |              |
| 7         | .236                | 3.376         | 100.000      |                                     |               |              |

Extraction Method: Principal Component Analysis.



### Component Matrix<sup>a</sup>

|        | Component |      |
|--------|-----------|------|
|        | 1         |      |
| RAGAP2 |           | .797 |
| RAGAP3 |           | .784 |
| RAGAP4 |           | .842 |
| RAGAP5 |           | .867 |
| RAGAP6 |           | .860 |
| RAGAP7 |           | .831 |
| RAGAP9 |           | .739 |

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

### Rotated Component Matrix<sup>a</sup>

|  |
|--|
|  |
|--|

a. Only one component was extracted. The solution cannot be rotated.

## RESOURCES ACQUISITION of ONLINE SOCIAL NETWORKING ADOPTION (RAOSN)

### KMO and Bartlett's Test

|  |                    |
|--|--------------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .876               |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square |
|  | df                 |
|  | Sig.               |
|  | 850.279            |
|  | 66                 |
|  | .000               |

### Anti-image Matrices

|                        |         | RAOSN1            | RAOSN2            | RAOSN3            | RAOSN4            | RAOSN5            | RAOSN6            | RAOSN7            | RAOSN8            | RAOSN9            | RAOSN10           | RAOSN11           | RAOSN12           |
|------------------------|---------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Anti-image Covariance  | RAOSN1  | .630              | -.176             | -.067             | .044              | .008              | -.164             | -.002             | -.068             | -.057             | .049              | .011              | -.028             |
|                        | RAOSN2  | -.176             | .581              | -.051             | -.111             | -.013             | -.044             | -.045             | .050              | -.068             | -.019             | -.060             | .051              |
|                        | RAOSN3  | -.067             | -.051             | .678              | -.100             | -.025             | .021              | -.051             | -.107             | .035              | -.128             | -.025             | .124              |
|                        | RAOSN4  | .044              | -.111             | -.100             | .599              | -.142             | .012              | .036              | -.048             | .026              | .042              | .049              | -.323             |
|                        | RAOSN5  | .008              | -.013             | -.025             | -.142             | .423              | -.067             | -.063             | -.038             | -.117             | -.025             | -.091             | .032              |
|                        | RAOSN6  | -.164             | -.044             | .021              | .012              | -.067             | .557              | -.014             | -.054             | -.020             | -.195             | .032              | -.051             |
|                        | RAOSN7  | -.002             | -.045             | -.051             | .036              | -.063             | -.014             | .518              | -.103             | -.079             | -.028             | -.080             | -.070             |
|                        | RAOSN8  | -.068             | .050              | -.107             | -.048             | -.038             | -.054             | -.103             | .590              | .002              | -.034             | -.084             | -.006             |
|                        | RAOSN9  | -.057             | -.068             | .035              | .026              | -.117             | -.020             | -.079             | .002              | .450              | .004              | -.131             | -.018             |
|                        | RAOSN10 | .049              | -.019             | -.128             | .042              | -.025             | -.195             | -.028             | -.034             | .004              | .576              | -.091             | .014              |
|                        | RAOSN11 | .011              | -.060             | -.025             | .049              | -.091             | .032              | -.080             | -.084             | -.131             | -.091             | .412              | .002              |
|                        | RAOSN12 | -.028             | .051              | .124              | -.323             | .032              | -.051             | -.070             | -.006             | -.018             | .014              | .002              | .699              |
| Anti-image Correlation | RAOSN1  | .866 <sup>a</sup> | -.291             | -.102             | .071              | .015              | -.277             | -.003             | -.112             | -.106             | .082              | .021              | -.042             |
|                        | RAOSN2  | -.291             | .901 <sup>a</sup> | -.081             | -.188             | -.026             | -.077             | -.083             | .086              | -.132             | -.033             | -.122             | .079              |
|                        | RAOSN3  | -.102             | -.081             | .885 <sup>a</sup> | -.157             | -.047             | .034              | -.086             | -.170             | .064              | -.204             | -.048             | .180              |
|                        | RAOSN4  | .071              | -.188             | -.157             | .647 <sup>a</sup> | -.282             | .020              | .065              | -.080             | .050              | .071              | .099              | -.498             |
|                        | RAOSN5  | .015              | -.026             | -.047             | -.282             | .906 <sup>a</sup> | -.137             | -.134             | -.076             | -.268             | -.051             | -.218             | .058              |
|                        | RAOSN6  | -.277             | -.077             | .034              | .020              | -.137             | .876 <sup>a</sup> | -.026             | -.094             | -.040             | -.344             | .066              | -.082             |
|                        | RAOSN7  | -.003             | -.083             | -.086             | .065              | -.134             | -.026             | .935 <sup>a</sup> | -.186             | -.163             | -.052             | -.173             | -.116             |
|                        | RAOSN8  | -.112             | .086              | -.170             | -.080             | -.076             | -.094             | -.186             | .928 <sup>a</sup> | .004              | -.058             | -.170             | -.009             |
|                        | RAOSN9  | -.106             | -.132             | .064              | .050              | -.268             | -.040             | -.163             | .004              | .905 <sup>a</sup> | .009              | -.305             | -.033             |
|                        | RAOSN10 | .082              | -.033             | -.204             | .071              | -.051             | -.344             | -.052             | -.058             | .009              | .882 <sup>a</sup> | -.188             | .022              |
|                        | RAOSN11 | .021              | -.122             | -.048             | .099              | -.218             | .066              | -.173             | -.170             | -.305             | -.188             | .899 <sup>a</sup> | .003              |
|                        | RAOSN12 | -.042             | .079              | .180              | -.498             | .058              | -.082             | -.116             | -.009             | -.033             | .022              | .003              | .557 <sup>a</sup> |

Measures of Sampling Adequacy(MSA)

### Communalities

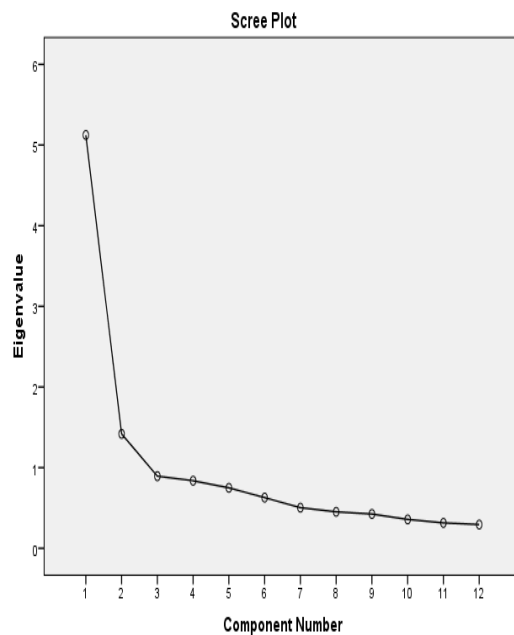
|         | Initial | Extraction |
|---------|---------|------------|
| RAOSN1  | 1.000   | .372       |
| RAOSN2  | 1.000   | .462       |
| RAOSN3  | 1.000   | .369       |
| RAOSN4  | 1.000   | .733       |
| RAOSN5  | 1.000   | .637       |
| RAOSN6  | 1.000   | .463       |
| RAOSN7  | 1.000   | .557       |
| RAOSN8  | 1.000   | .481       |
| RAOSN9  | 1.000   | .580       |
| RAOSN10 | 1.000   | .495       |
| RAOSN11 | 1.000   | .639       |
| RAOSN12 | 1.000   | .753       |

Extraction Method: Principal Component Analysis.

### Total Variance Explained

| Component | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              | Rotation Sums of Squared Loadings |               |              |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % | Total                             | % of Variance | Cumulative % |
| 1         | 5.124               | 42.697        | 42.697       | 5.124                               | 42.697        | 42.697       | 4.890                             | 40.748        | 40.748       |
| 2         | 1.418               | 11.819        | 54.517       | 1.418                               | 11.819        | 54.517       | 1.652                             | 13.769        | 54.517       |
| 3         | .894                | 7.453         | 61.970       |                                     |               |              |                                   |               |              |
| 4         | .838                | 6.987         | 68.957       |                                     |               |              |                                   |               |              |
| 5         | .749                | 6.243         | 75.200       |                                     |               |              |                                   |               |              |
| 6         | .628                | 5.235         | 80.435       |                                     |               |              |                                   |               |              |
| 7         | .503                | 4.192         | 84.627       |                                     |               |              |                                   |               |              |
| 8         | .452                | 3.766         | 88.393       |                                     |               |              |                                   |               |              |
| 9         | .425                | 3.544         | 91.937       |                                     |               |              |                                   |               |              |
| 10        | .358                | 2.985         | 94.921       |                                     |               |              |                                   |               |              |
| 11        | .315                | 2.626         | 97.548       |                                     |               |              |                                   |               |              |
| 12        | .294                | 2.452         | 100.000      |                                     |               |              |                                   |               |              |

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

|         | Component |      |
|---------|-----------|------|
|         | 1         | 2    |
| RAOSN1  | .606      | .758 |
| RAOSN2  | .680      |      |
| RAOSN3  | .581      |      |
| RAOSN4  |           |      |
| RAOSN5  | .793      |      |
| RAOSN6  | .679      |      |
| RAOSN7  | .746      |      |
| RAOSN8  | .692      |      |
| RAOSN9  | .759      |      |
| RAOSN10 | .658      |      |
| RAOSN11 | .783      |      |
| RAOSN12 |           | .837 |

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

|         | Component |      |
|---------|-----------|------|
|         | 1         | 2    |
| RAOSN1  | .604      | .834 |
| RAOSN2  | .656      |      |
| RAOSN3  | .607      |      |
| RAOSN4  |           |      |
| RAOSN5  | .746      |      |
| RAOSN6  | .670      |      |
| RAOSN7  | .731      |      |
| RAOSN8  | .679      |      |
| RAOSN9  | .749      |      |
| RAOSN10 | .700      |      |
| RAOSN11 | .798      |      |
| RAOSN12 |           | .868 |

Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

| Component | 1     | 2    |
|-----------|-------|------|
| 1         | .968  | .251 |
| 2         | -.251 | .968 |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.



## RAOSN DELETING RAOSN4, RAOSN12

### KMO and Bartlett's Test

|  |         |
|--|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .907    |
| Bartlett's Test of Sphericity                    | 749.602 |
| Approx. Chi-Square                               |         |
| df   | 45      |
| Sig.   | .000    |

### Anti-image Matrices

|                        |         | RAOSN1            | RAOSN2            | RAOSN3            | RAOSN5            | RAOSN6            | RAOSN7            | RAOSN8            | RAOSN9            | RAOSN10           | RAOSN11           |
|------------------------|---------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Anti-image Covariance  | RAOSN1  | .633              | -.175             | -.061             | .019              | -.168             | -.005             | -.066             | -.059             | .047              | .007              |
|                        | RAOSN2  | -.175             | .602              | -.074             | -.045             | -.044             | -.042             | .043              | -.066             | -.011             | -.052             |
|                        | RAOSN3  | -.061             | -.074             | .705              | -.049             | .031              | -.040             | -.117             | .042              | -.132             | -.022             |
|                        | RAOSN5  | .019              | -.045             | -.049             | .464              | -.075             | -.065             | -.058             | -.122             | -.013             | -.086             |
|                        | RAOSN6  | -.168             | -.044             | .031              | -.075             | .561              | -.020             | -.057             | -.021             | -.196             | .034              |
|                        | RAOSN7  | -.005             | -.042             | -.040             | -.065             | -.020             | .525              | -.106             | -.082             | -.028             | -.083             |
|                        | RAOSN8  | -.066             | .043              | -.117             | -.058             | -.057             | -.106             | .596              | .004              | -.029             | -.080             |
|                        | RAOSN9  | -.059             | -.066             | .042              | -.122             | -.021             | -.082             | .004              | .451              | .003              | -.136             |
|                        | RAOSN10 | .047              | -.011             | -.132             | -.013             | -.196             | -.028             | -.029             | .003              | .582              | -.099             |
|                        | RAOSN11 | .007              | -.052             | -.022             | -.086             | .034              | -.083             | -.080             | -.136             | -.099             | .418              |
| Anti-image Correlation | RAOSN1  | .870 <sup>a</sup> | -.284             | -.092             | .036              | -.281             | -.008             | -.108             | -.110             | .078              | .014              |
|                        | RAOSN2  | -.284             | .918 <sup>a</sup> | -.113             | -.086             | -.076             | -.074             | .072              | -.126             | -.019             | -.105             |
|                        | RAOSN3  | -.092             | -.113             | .911 <sup>a</sup> | -.086             | .048              | -.066             | -.180             | .074              | -.206             | -.040             |
|                        | RAOSN5  | .036              | -.086             | -.086             | .927 <sup>a</sup> | -.146             | -.131             | -.110             | -.268             | -.026             | -.195             |
|                        | RAOSN6  | -.281             | -.076             | .048              | -.146             | .872 <sup>a</sup> | -.036             | -.098             | -.042             | -.343             | .070              |
|                        | RAOSN7  | -.008             | -.074             | -.066             | -.131             | -.036             | .941 <sup>a</sup> | -.189             | -.169             | -.050             | -.176             |
|                        | RAOSN8  | -.108             | .072              | -.180             | -.110             | -.098             | -.189             | .926 <sup>a</sup> | .007              | -.049             | -.161             |
|                        | RAOSN9  | -.110             | -.126             | .074              | -.268             | -.042             | -.169             | .007              | .902 <sup>a</sup> | .006              | -.312             |
|                        | RAOSN10 | .078              | -.019             | -.206             | -.026             | -.343             | -.050             | -.049             | .006              | .884 <sup>a</sup> | -.201             |
|                        | RAOSN11 | .014              | -.105             | -.040             | -.195             | .070              | -.176             | -.161             | -.312             | -.201             | .903 <sup>a</sup> |

a. Measures of Sampling Adequacy(MSA)

### Communalities

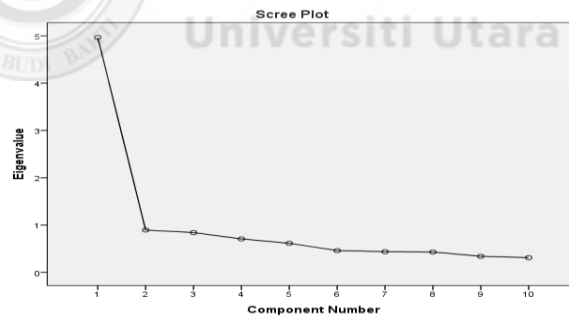
|         | Initial | Extraction |
|---------|---------|------------|
| RAOSN1  | 1.000   | .375       |
| RAOSN2  | 1.000   | .458       |
| RAOSN3  | 1.000   | .345       |
| RAOSN5  | 1.000   | .612       |
| RAOSN6  | 1.000   | .465       |
| RAOSN7  | 1.000   | .561       |
| RAOSN8  | 1.000   | .480       |
| RAOSN9  | 1.000   | .586       |
| RAOSN10 | 1.000   | .454       |
| RAOSN11 | 1.000   | .633       |

Extraction Method: Principal Component Analysis.

### Total Variance Explained

| Component | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % |
| 1         | 4.967               | 49.666        | 49.666       | 4.967                               | 49.666        | 49.666       |
| 2         | .894                | 8.943         | 58.609       |                                     |               |              |
| 3         | .841                | 8.411         | 67.020       |                                     |               |              |
| 4         | .707                | 7.067         | 74.087       |                                     |               |              |
| 5         | .614                | 6.143         | 80.231       |                                     |               |              |
| 6         | .460                | 4.603         | 84.833       |                                     |               |              |
| 7         | .437                | 4.369         | 89.203       |                                     |               |              |
| 8         | .430                | 4.303         | 93.505       |                                     |               |              |
| 9         | .339                | 3.395         | 96.900       |                                     |               |              |
| 10        | .310                | 3.100         | 100.000      |                                     |               |              |

Extraction Method: Principal Component Analysis.



### Component Matrix<sup>a</sup>

|         | Component |
|---------|-----------|
|         | 1         |
| RAOSN1  | .612      |
| RAOSN2  | .676      |
| RAOSN3  | .587      |
| RAOSN5  | .783      |
| RAOSN6  | .682      |
| RAOSN7  | .749      |
| RAOSN8  | .693      |
| RAOSN9  | .765      |
| RAOSN10 | .673      |
| RAOSN11 | .796      |

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

### Rotated Component Matrix<sup>a</sup>

a. Only one component was extracted. The solution cannot be rotated.

## RELIABILITY ANALYSIS NASCENT VENTURE BUSINESS PERFORMANCE (NVP)

**Case Processing Summary**

|       |                       | N   | %     |
|-------|-----------------------|-----|-------|
| Cases | Valid                 | 183 | 100.0 |
|       | Excluded <sup>a</sup> | 0   | .0    |
|       | Total                 | 183 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .814             | 6          |

**Item-Total Statistics**

|     | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-----|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| BP1 | 18.45                      | 9.468                          | .574                             | .786                             |
| BP2 | 18.80                      | 8.609                          | .583                             | .786                             |
| BP3 | 18.38                      | 9.247                          | .597                             | .781                             |
| BP4 | 18.48                      | 9.778                          | .495                             | .802                             |
| BP5 | 18.31                      | 9.301                          | .606                             | .779                             |
| BP6 | 18.30                      | 9.066                          | .615                             | .777                             |

**Scale Statistics**

| Mean  | Variance | Std. Deviation | N of Items |
|-------|----------|----------------|------------|
| 22.14 | 12.837   | 3.583          | 6          |

## ENTREPRENEURIAL STRATEGY OF ENTREPRENEURIAL BRICOLAGE (ESEB)

**Case Processing Summary**

|       |                       | N   | %     |
|-------|-----------------------|-----|-------|
| Cases | Valid                 | 183 | 100.0 |
|       | Excluded <sup>a</sup> | 0   | .0    |
|       | Total                 | 183 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .795             | 6          |

**Item-Total Statistics**

|       | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| ESEB1 | 20.09                      | 6.228                          | .481                             | .779                             |
| ESEB2 | 19.99                      | 5.808                          | .567                             | .760                             |
| ESEB3 | 19.88                      | 5.348                          | .674                             | .732                             |
| ESEB4 | 19.98                      | 5.945                          | .534                             | .768                             |
| ESEB5 | 19.95                      | 6.168                          | .453                             | .786                             |
| ESEB6 | 19.99                      | 5.819                          | .584                             | .756                             |

**Scale Statistics**

| Mean  | Variance | Std. Deviation | N of Items |
|-------|----------|----------------|------------|
| 23.98 | 8.142    | 2.853          | 6          |

**ENTREPRENEURIAL STRATEGY OF ENTREPRENEURIAL ORIENTATION (ESEO)****INNOVATIVENESS****Case Processing Summary**

|                       | N   | %     |
|-----------------------|-----|-------|
| Cases Valid           | 183 | 100.0 |
| Excluded <sup>a</sup> | 0   | .0    |
| Total                 | 183 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .755             | 3          |

**Item-Total Statistics**

|       | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| ESEO1 | 7.20                       | 1.785                          | .674                             | .563                             |
| ESEO2 | 7.30                       | 2.014                          | .591                             | .665                             |
| ESEO3 | 7.57                       | 2.137                          | .495                             | .771                             |

## PROACTIVENESS

### Case Processing Summary

|       |                       | N   | %     |
|-------|-----------------------|-----|-------|
| Cases | Valid                 | 183 | 100.0 |
|       | Excluded <sup>a</sup> | 0   | .0    |
|       | Total                 | 183 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .781             | 3          |

### Item-Total Statistics

|       | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| ESEO4 | 7.61                       | 1.888                          | .660                             | .656                             |
| ESEO5 | 7.64                       | 1.935                          | .680                             | .634                             |
| ESEO6 | 7.74                       | 2.271                          | .522                             | .802                             |

## RISKINESS

### Case Processing Summary

|       |                       | N   | %     |
|-------|-----------------------|-----|-------|
| Cases | Valid                 | 183 | 100.0 |
|       | Excluded <sup>a</sup> | 0   | .0    |
|       | Total                 | 183 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .824             | 3          |

### Item-Total Statistics

|       | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| ESEO7 | 7.01                       | 2.626                          | .637                             | .801                             |
| ESEO8 | 7.60                       | 2.088                          | .731                             | .703                             |
| ESEO9 | 8.05                       | 2.256                          | .681                             | .755                             |

## RESOURCE ACQUISITION GOVERNMENT ASSISTANCE PROGRAM (RAGAP)

### Case Processing Summary

|       |                       | N   | %     |
|-------|-----------------------|-----|-------|
| Cases | Valid                 | 183 | 100.0 |
|       | Excluded <sup>a</sup> | 0   | .0    |
|       | Total                 | 183 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .914             | 7          |

#### Item-Total Statistics

|        | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|--------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| RAGAP2 | 19.90                      | 26.858                         | .718                             | .904                             |
| RAGAP3 | 20.25                      | 25.255                         | .703                             | .906                             |
| RAGAP4 | 20.15                      | 23.735                         | .774                             | .899                             |
| RAGAP5 | 19.83                      | 25.123                         | .809                             | .894                             |
| RAGAP6 | 19.83                      | 25.339                         | .796                             | .896                             |
| RAGAP7 | 19.83                      | 26.372                         | .762                             | .900                             |
| RAGAP9 | 19.68                      | 25.987                         | .647                             | .911                             |

#### Scale Statistics

| Mean  | Variance | Std. Deviation | N of Items |
|-------|----------|----------------|------------|
| 23.25 | 34.252   | 5.853          | 7          |

### RESOURCES ACQUISITION of ONLINE SOCIAL NETWORKING ADOPTION (RAOSN)

#### Case Processing Summary

|       |                       | N   | %     |
|-------|-----------------------|-----|-------|
| Cases | Valid                 | 183 | 100.0 |
|       | Excluded <sup>a</sup> | 0   | .0    |
|       | Total                 | 183 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

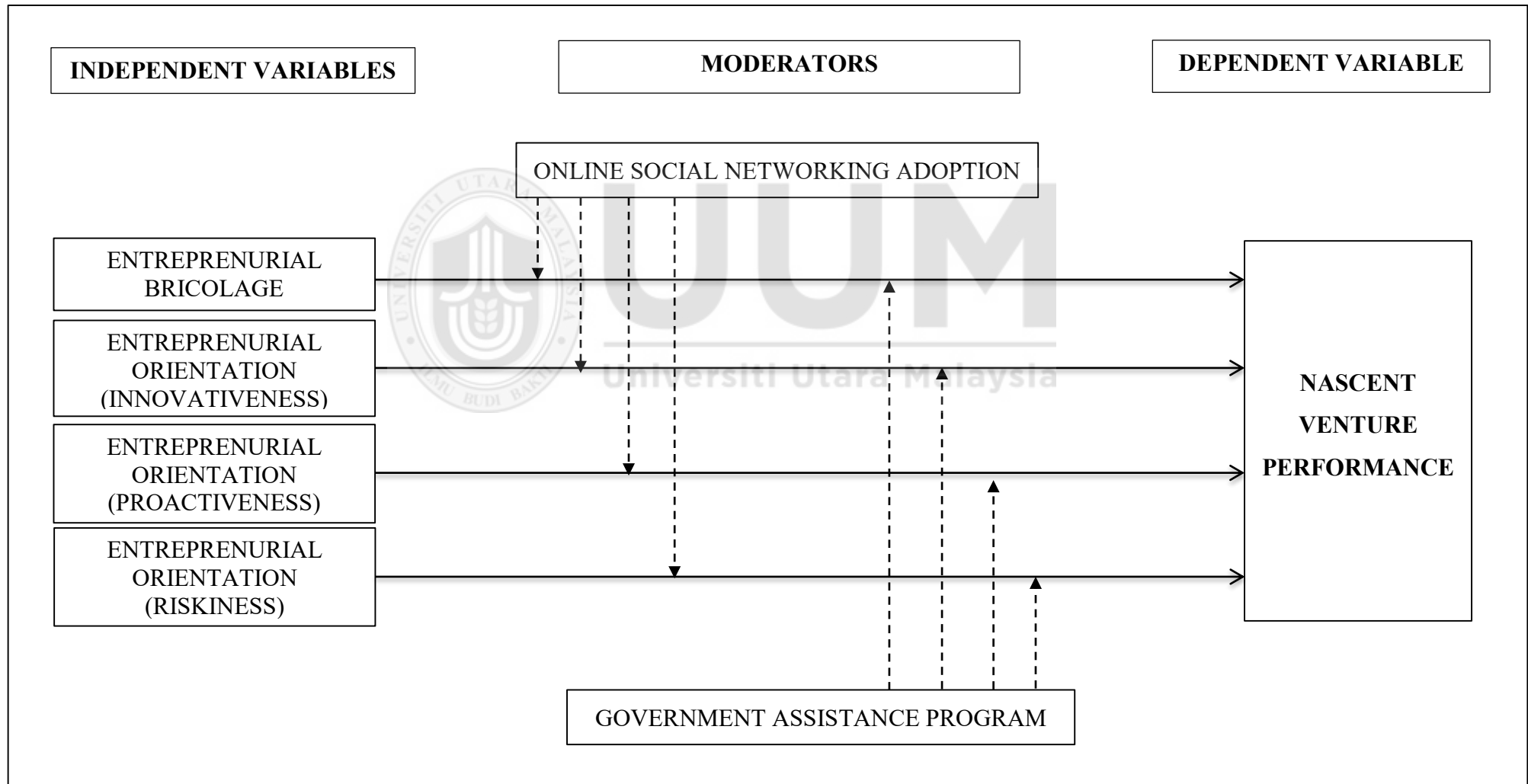
#### Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .885             | 10         |

#### Item-Total Statistics

|         | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| RAOSN1  | 35.89                      | 19.570                         | .530                             | .880                             |
| RAOSN2  | 36.03                      | 18.845                         | .593                             | .876                             |
| RAOSN3  | 36.04                      | 19.597                         | .504                             | .882                             |
| RAOSN5  | 36.01                      | 18.610                         | .701                             | .868                             |
| RAOSN6  | 36.13                      | 19.290                         | .602                             | .875                             |
| RAOSN7  | 35.97                      | 18.790                         | .664                             | .871                             |
| RAOSN8  | 35.98                      | 19.214                         | .607                             | .875                             |
| RAOSN9  | 36.00                      | 18.857                         | .680                             | .870                             |
| RAOSN10 | 36.07                      | 19.018                         | .589                             | .876                             |
| RAOSN11 | 35.93                      | 18.369                         | .716                             | .867                             |

## RESEARCH FRAMEWORK AFTER FACTOR ANALYSIS



## TEST FOR MULTIVRIATE ASSUMPTION ANALYSIS

### NORMALITY TEST

|  | Descriptive Statistics |           |            |            |           |            |            |
|--|------------------------|-----------|------------|------------|-----------|------------|------------|
|  | N                      | Skewness  |            | Z-Skewness | Kurtosis  |            | Z-Kurtosis |
|  |                        | Statistic | Std. Error |            | Statistic | Std. Error |            |
| Nascent venture performance (BP)                       | 183                    | .083      | .180       | -.192      | .977      | .357       | -.691      |
| Entrepreneurial Bricolage (ESEB)                       | 183                    | .082      | .180       | -.121      | .982      | .357       | -.535      |
| Entrepreneurial orientation innovativeness (ESEO_INNO) | 183                    | .102      | .180       | -.004      | .966      | .357       | -.685      |
| Entrepreneurial orientation proactiveness (ESEO_PRO)   | 183                    | .113      | .180       | -.239      | .962      | .357       | -.566      |
| Entrepreneurial orientation risk-taking (ESEO_RT)      | 183                    | .100      | .180       | -.160      | .963      | .357       | -.681      |
| Government assistance program (RAGAP)                  | 183                    | .049      | .180       | -.088      | .987      | .357       | -.630      |
| Online social networking (RAOSN)                       | 183                    | .055      | .180       | -.038      | .983      | .357       | -.506      |
| Valid N (listwise)                                     | 183                    |           |            |            |           |            |            |

Note: Data is normal when the value of Z- skewness in the span of -2.58 to +2.58.

|                        |         | Statistics |             |                |               |              |              |              |
|------------------------|---------|------------|-------------|----------------|---------------|--------------|--------------|--------------|
|                        |         | TotalBPfa  | TotalESEBfa | TotalEO_INNOfa | TotalEO_PROfa | TotalEO_RTfa | TotalRAGAPfa | TotalRAOSNfa |
| N                      | Valid   | 183        | 183         | 183            | 183           | 183          | 183          | 183          |
|                        | Missing | 0          | 0           | 0              | 0             | 0            | 0            | 0            |
| Skewness               |         | -.192      | -.121       | -.004          | -.239         | -.160        | -.088        | .038         |
| Std. Error of Skewness |         | .180       | .180        | .180           | .180          | .180         | .180         | .180         |
| Kurtosis               |         | -.691      | -.535       | -.685          | -.566         | -.681        | -.630        | -.506        |
| Std. Error of Kurtosis |         | .357       | .357        | .357           | .357          | .357         | .357         | .357         |



## Frequency Table

|       |       | TotalBPfa |         |               |                    |
|-------|-------|-----------|---------|---------------|--------------------|
|       |       | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 14.00 | 1         | .5      | .5            | .5                 |
|       | 15.00 | 6         | 3.3     | 3.3           | 3.8                |
|       | 16.00 | 7         | 3.8     | 3.8           | 7.7                |
|       | 17.00 | 9         | 4.9     | 4.9           | 12.6               |
|       | 18.00 | 11        | 6.0     | 6.0           | 18.6               |
|       | 19.00 | 10        | 5.5     | 5.5           | 24.0               |
|       | 20.00 | 12        | 6.6     | 6.6           | 30.6               |
|       | 21.00 | 20        | 10.9    | 10.9          | 41.5               |
|       | 22.00 | 19        | 10.4    | 10.4          | 51.9               |
|       | 23.00 | 21        | 11.5    | 11.5          | 63.4               |
|       | 24.00 | 13        | 7.1     | 7.1           | 70.5               |
|       | 25.00 | 16        | 8.7     | 8.7           | 79.2               |
|       | 26.00 | 18        | 9.8     | 9.8           | 89.1               |
|       | 27.00 | 11        | 6.0     | 6.0           | 95.1               |
|       | 28.00 | 5         | 2.7     | 2.7           | 97.8               |
|       | 29.00 | 3         | 1.6     | 1.6           | 99.5               |
|       | 30.00 | 1         | .5      | .5            | 100.0              |
|       | Total | 183       | 100.0   | 100.0         |                    |

|       |       | TotalESEBfa |         |               |                    |
|-------|-------|-------------|---------|---------------|--------------------|
|       |       | Frequency   | Percent | Valid Percent | Cumulative Percent |
| Valid | 17.00 | 2           | 1.1     | 1.1           | 1.1                |
|       | 18.00 | 3           | 1.6     | 1.6           | 2.7                |
|       | 19.00 | 6           | 3.3     | 3.3           | 6.0                |
|       | 20.00 | 12          | 6.6     | 6.6           | 12.6               |
|       | 21.00 | 14          | 7.7     | 7.7           | 20.2               |
|       | 22.00 | 20          | 10.9    | 10.9          | 31.1               |
|       | 23.00 | 22          | 12.0    | 12.0          | 43.2               |
|       | 24.00 | 23          | 12.6    | 12.6          | 55.7               |
|       | 25.00 | 23          | 12.6    | 12.6          | 68.3               |
|       | 26.00 | 20          | 10.9    | 10.9          | 79.2               |
|       | 27.00 | 17          | 9.3     | 9.3           | 88.5               |
|       | 28.00 | 12          | 6.6     | 6.6           | 95.1               |
|       | 29.00 | 6           | 3.3     | 3.3           | 98.4               |
|       | 30.00 | 3           | 1.6     | 1.6           | 100.0              |
|       | Total | 183         | 100.0   | 100.0         |                    |

|       |       | TotalEO_INNOfa |         |               |                    |
|-------|-------|----------------|---------|---------------|--------------------|
|       |       | Frequency      | Percent | Valid Percent | Cumulative Percent |
| Valid | 7.00  | 6              | 3.3     | 3.3           | 3.3                |
|       | 8.00  | 15             | 8.2     | 8.2           | 11.5               |
|       | 9.00  | 23             | 12.6    | 12.6          | 24.0               |
|       | 10.00 | 29             | 15.8    | 15.8          | 39.9               |
|       | 11.00 | 34             | 18.6    | 18.6          | 58.5               |
|       | 12.00 | 31             | 16.9    | 16.9          | 75.4               |
|       | 13.00 | 23             | 12.6    | 12.6          | 88.0               |
|       | 14.00 | 15             | 8.2     | 8.2           | 96.2               |
|       | 15.00 | 7              | 3.8     | 3.8           | 100.0              |
|       | Total | 183            | 100.0   | 100.0         |                    |

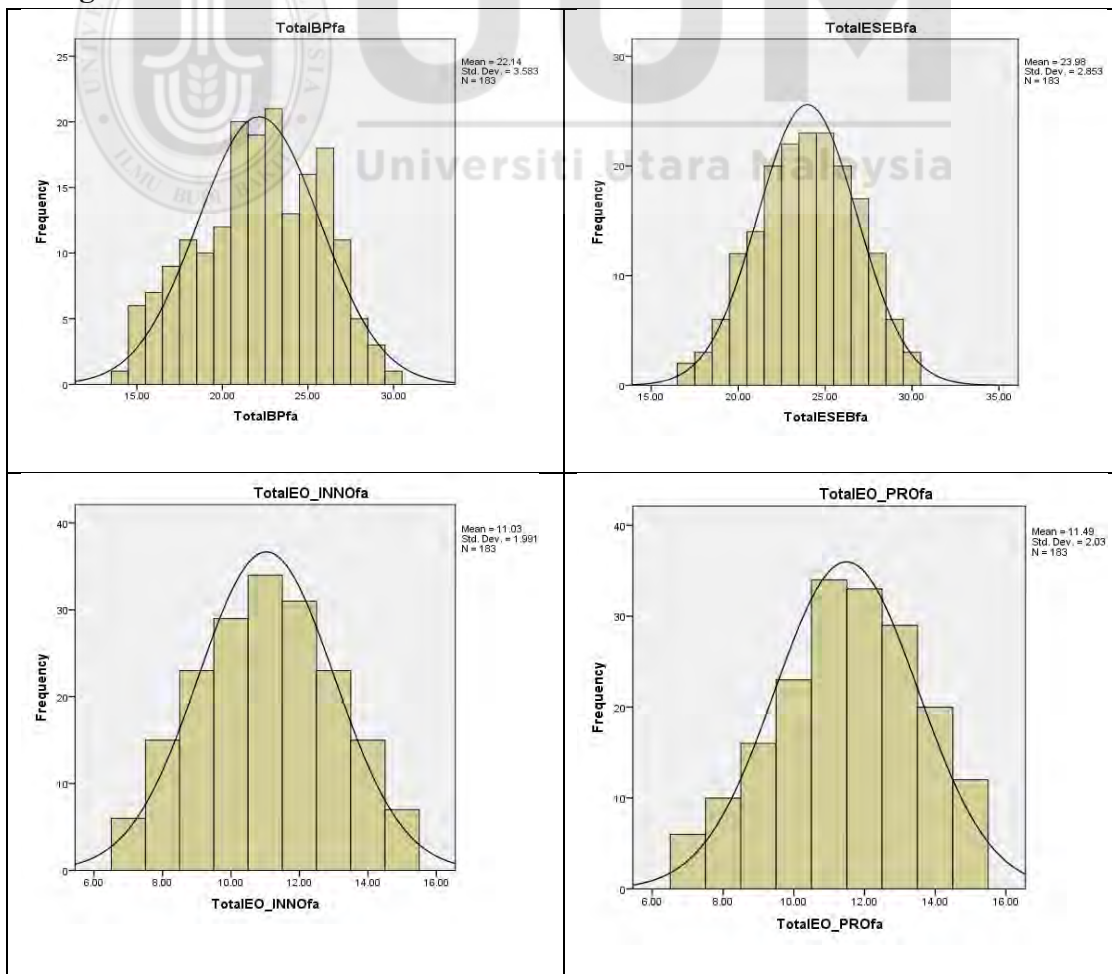
| TotalEO_PROfa |           |         |               |                    |
|---------------|-----------|---------|---------------|--------------------|
|               | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid         | 7.00      | 6       | 3.3           | 3.3                |
|               | 8.00      | 10      | 5.5           | 8.7                |
|               | 9.00      | 16      | 8.7           | 17.5               |
|               | 10.00     | 23      | 12.6          | 30.1               |
|               | 11.00     | 34      | 18.6          | 48.6               |
|               | 12.00     | 33      | 18.0          | 66.7               |
|               | 13.00     | 29      | 15.8          | 82.5               |
|               | 14.00     | 20      | 10.9          | 93.4               |
|               | 15.00     | 12      | 6.6           | 100.0              |
| Total         |           | 183     | 100.0         |                    |

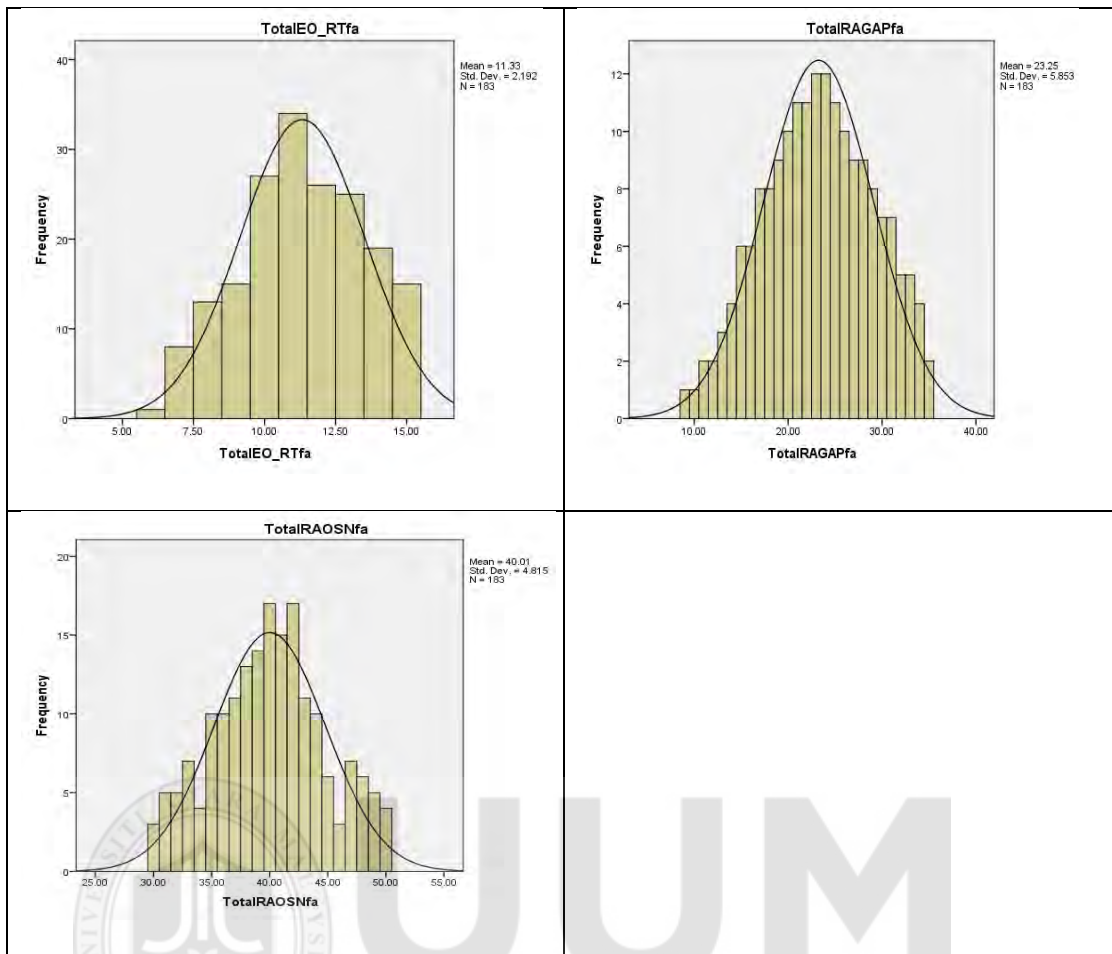
| TotalEO_RTfa |           |         |               |                    |
|--------------|-----------|---------|---------------|--------------------|
|              | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid        | 6.00      | 1       | .5            | .5                 |
|              | 7.00      | 8       | 4.4           | 4.9                |
|              | 8.00      | 13      | 7.1           | 12.0               |
|              | 9.00      | 15      | 8.2           | 20.2               |
|              | 10.00     | 27      | 14.8          | 35.0               |
|              | 11.00     | 34      | 18.6          | 53.6               |
|              | 12.00     | 26      | 14.2          | 67.8               |
|              | 13.00     | 25      | 13.7          | 81.4               |
|              | 14.00     | 19      | 10.4          | 91.8               |
|              | 15.00     | 15      | 8.2           | 100.0              |
| Total        |           | 183     | 100.0         |                    |

| TotalRAGAPfa |           |         |               |                    |
|--------------|-----------|---------|---------------|--------------------|
|              | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid        | 9.00      | 1       | .5            | .5                 |
|              | 10.00     | 1       | .5            | 1.1                |
|              | 11.00     | 2       | 1.1           | 2.2                |
|              | 12.00     | 2       | 1.1           | 3.3                |
|              | 13.00     | 3       | 1.6           | 4.9                |
|              | 14.00     | 4       | 2.2           | 7.1                |
|              | 15.00     | 6       | 3.3           | 10.4               |
|              | 16.00     | 6       | 3.3           | 13.7               |
|              | 17.00     | 8       | 4.4           | 18.0               |
|              | 18.00     | 8       | 4.4           | 22.4               |
|              | 19.00     | 9       | 4.9           | 27.3               |
|              | 20.00     | 10      | 5.5           | 32.8               |
|              | 21.00     | 11      | 6.0           | 38.8               |
|              | 22.00     | 11      | 6.0           | 44.8               |
|              | 23.00     | 12      | 6.6           | 51.4               |
|              | 24.00     | 12      | 6.6           | 57.9               |
|              | 25.00     | 11      | 6.0           | 63.9               |
|              | 26.00     | 10      | 5.5           | 69.4               |
|              | 27.00     | 9       | 4.9           | 74.3               |
|              | 28.00     | 9       | 4.9           | 79.2               |
|              | 29.00     | 8       | 4.4           | 83.6               |
|              | 30.00     | 7       | 3.8           | 87.4               |
|              | 31.00     | 7       | 3.8           | 91.3               |
|              | 32.00     | 5       | 2.7           | 94.0               |
|              | 33.00     | 5       | 2.7           | 96.7               |
|              | 34.00     | 4       | 2.2           | 98.9               |
|              | 35.00     | 2       | 1.1           | 100.0              |
| Total        |           | 183     | 100.0         |                    |

| TotalRAOSNfa |       | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-------|-----------|---------|---------------|--------------------|
| Valid        | 30.00 | 3         | 1.6     | 1.6           | 1.6                |
|              | 31.00 | 5         | 2.7     | 2.7           | 4.4                |
|              | 32.00 | 5         | 2.7     | 2.7           | 7.1                |
|              | 33.00 | 7         | 3.8     | 3.8           | 10.9               |
|              | 34.00 | 4         | 2.2     | 2.2           | 13.1               |
|              | 35.00 | 10        | 5.5     | 5.5           | 18.6               |
|              | 36.00 | 10        | 5.5     | 5.5           | 24.0               |
|              | 37.00 | 11        | 6.0     | 6.0           | 30.1               |
|              | 38.00 | 13        | 7.1     | 7.1           | 37.2               |
|              | 39.00 | 14        | 7.7     | 7.7           | 44.8               |
|              | 40.00 | 17        | 9.3     | 9.3           | 54.1               |
|              | 41.00 | 15        | 8.2     | 8.2           | 62.3               |
|              | 42.00 | 17        | 9.3     | 9.3           | 71.6               |
|              | 43.00 | 11        | 6.0     | 6.0           | 77.6               |
|              | 44.00 | 10        | 5.5     | 5.5           | 83.1               |
|              | 45.00 | 6         | 3.3     | 3.3           | 86.3               |
|              | 46.00 | 3         | 1.6     | 1.6           | 88.0               |
|              | 47.00 | 7         | 3.8     | 3.8           | 91.8               |
|              | 48.00 | 6         | 3.3     | 3.3           | 95.1               |
|              | 49.00 | 5         | 2.7     | 2.7           | 97.8               |
|              | 50.00 | 4         | 2.2     | 2.2           | 100.0              |
|              | Total | 183       | 100.0   | 100.0         |                    |

## Histogram





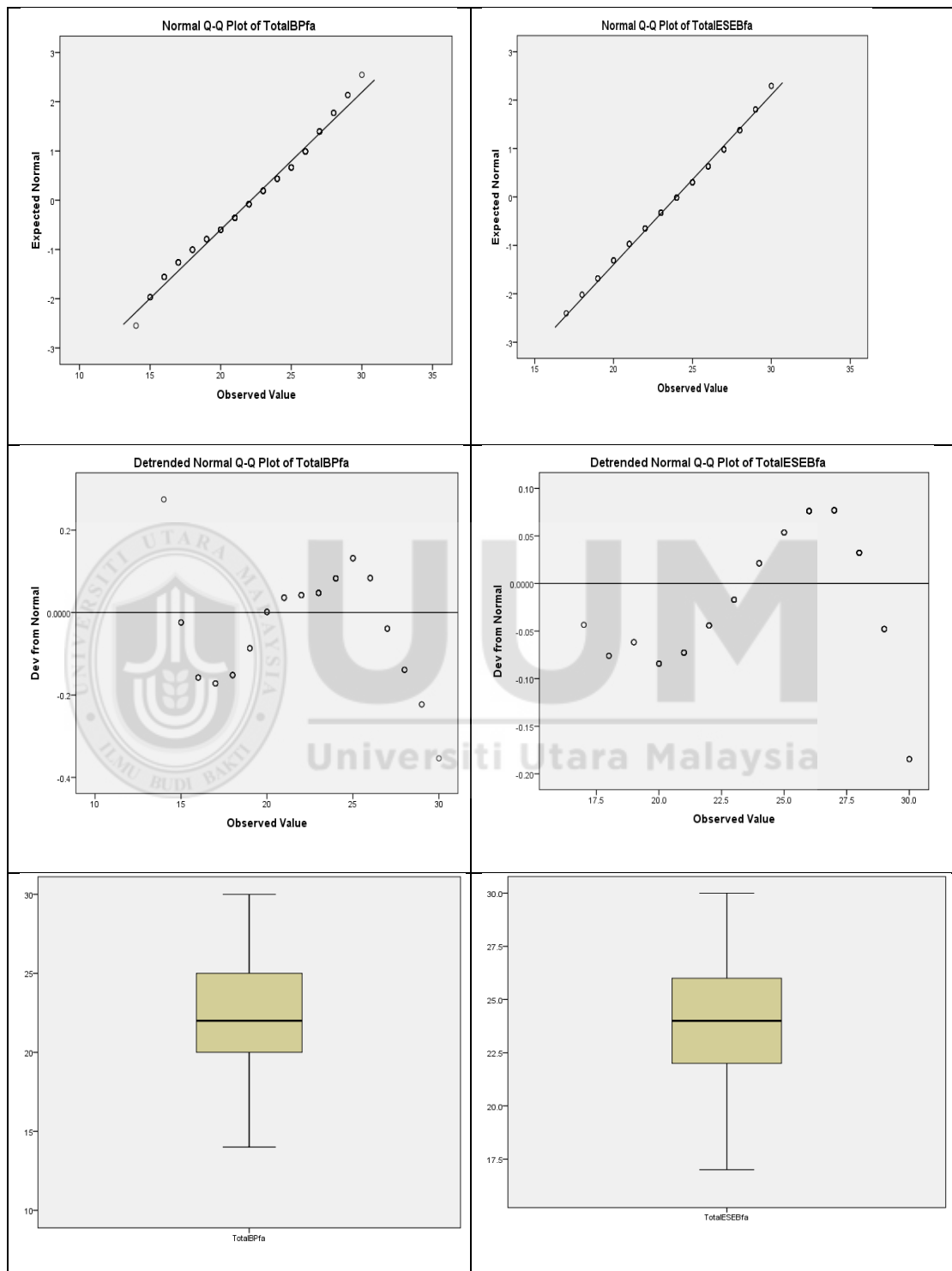
## Descriptives

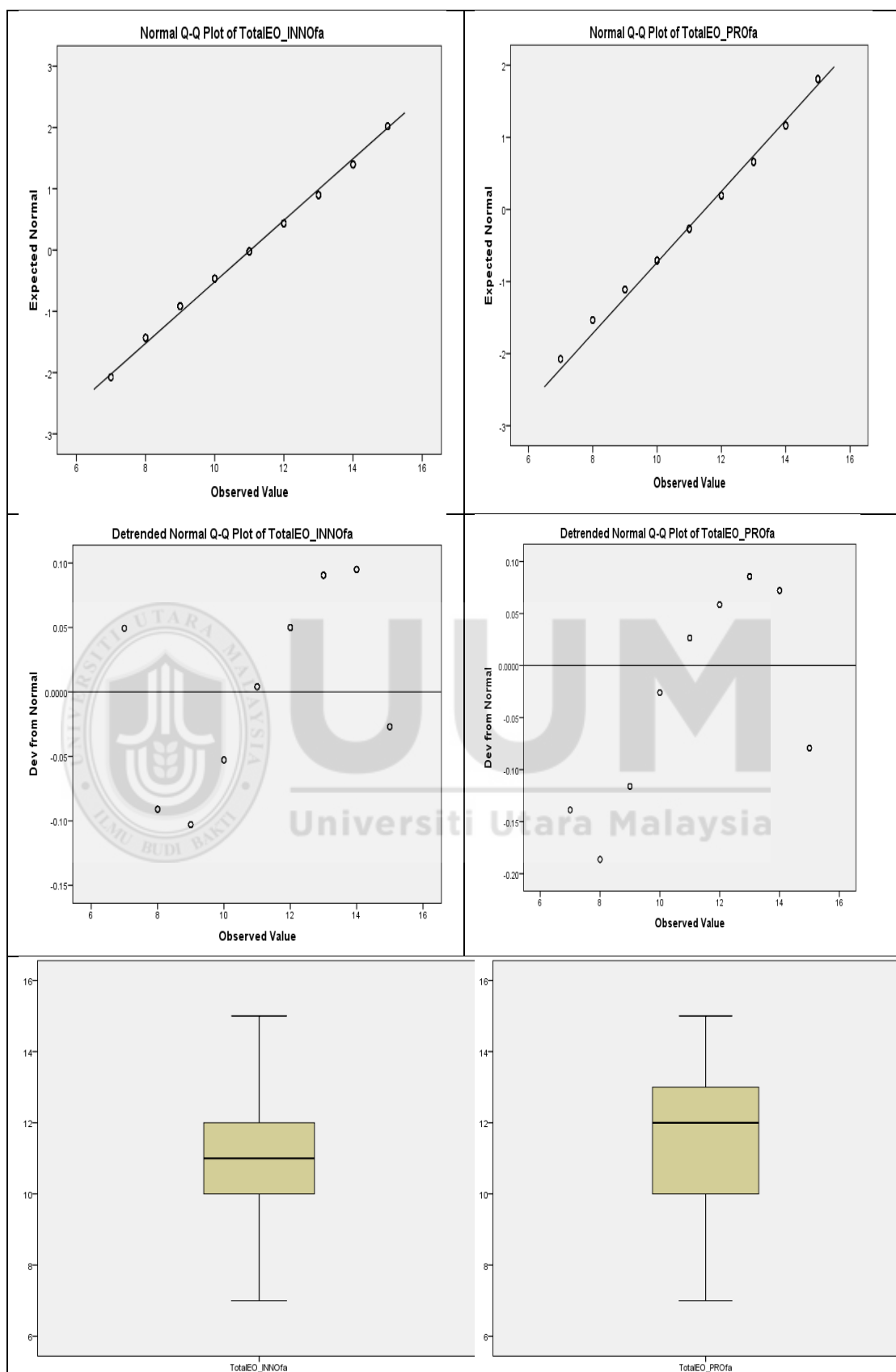
|           |                                  |             | Statistic | Std. Error |
|-----------|----------------------------------|-------------|-----------|------------|
| TotalBPfa | Mean                             |             | 22.1421   | .26485     |
|           | 95% Confidence Interval for Mean | Lower Bound | 21.6195   |            |
|           |                                  | Upper Bound | 22.6647   |            |
|           | 5% Trimmed Mean                  |             | 22.1770   |            |
|           | Median                           |             | 22.0000   |            |
|           | Variance                         |             | 12.837    |            |
|           | Std. Deviation                   |             | 3.58285   |            |
|           | Minimum                          |             | 14.00     |            |
|           | Maximum                          |             | 30.00     |            |
|           | Range                            |             | 16.00     |            |
|           | Interquartile Range              |             | 5.00      |            |
|           | Skewness                         |             | -.192     | .180       |
|           | Kurtosis                         |             | -.691     | .357       |

|                |                                  |             |         |        |
|----------------|----------------------------------|-------------|---------|--------|
| TotalESEBfa    | Mean                             |             | 23.9781 | .21094 |
|                | 95% Confidence Interval for Mean | Lower Bound | 23.5619 |        |
|                |                                  | Upper Bound | 24.3943 |        |
|                | 5% Trimmed Mean                  |             | 24.0009 |        |
|                | Median                           |             | 24.0000 |        |
|                | Variance                         |             | 8.142   |        |
|                | Std. Deviation                   |             | 2.85349 |        |
|                | Minimum                          |             | 17.00   |        |
|                | Maximum                          |             | 30.00   |        |
|                | Range                            |             | 13.00   |        |
|                | Interquartile Range              |             | 4.00    |        |
|                | Skewness                         |             | -.121   | .180   |
|                | Kurtosis                         |             | -.535   | .357   |
|                |                                  |             |         |        |
| TotalEO_INNOfa | Mean                             |             | 11.0328 | .14721 |
|                | 95% Confidence Interval for Mean | Lower Bound | 10.7423 |        |
|                |                                  | Upper Bound | 11.3233 |        |
|                | 5% Trimmed Mean                  |             | 11.0304 |        |
|                | Median                           |             | 11.0000 |        |
|                | Variance                         |             | 3.966   |        |
|                | Std. Deviation                   |             | 1.99147 |        |
|                | Minimum                          |             | 7.00    |        |
|                | Maximum                          |             | 15.00   |        |
|                | Range                            |             | 8.00    |        |
|                | Interquartile Range              |             | 2.00    |        |
|                | Skewness                         |             | -.004   | .180   |
|                | Kurtosis                         |             | -.685   | .357   |
|                |                                  |             |         |        |
| TotalEO_PROfa  | Mean                             |             | 11.4918 | .15004 |
|                | 95% Confidence Interval for Mean | Lower Bound | 11.1958 |        |
|                |                                  | Upper Bound | 11.7878 |        |
|                | 5% Trimmed Mean                  |             | 11.5273 |        |
|                | Median                           |             | 12.0000 |        |
|                | Variance                         |             | 4.119   |        |
|                | Std. Deviation                   |             | 2.02964 |        |
|                | Minimum                          |             | 7.00    |        |
|                | Maximum                          |             | 15.00   |        |
|                | Range                            |             | 8.00    |        |
|                | Interquartile Range              |             | 3.00    |        |
|                | Skewness                         |             | -.239   | .180   |
|                | Kurtosis                         |             | -.566   | .357   |
|                |                                  |             |         |        |

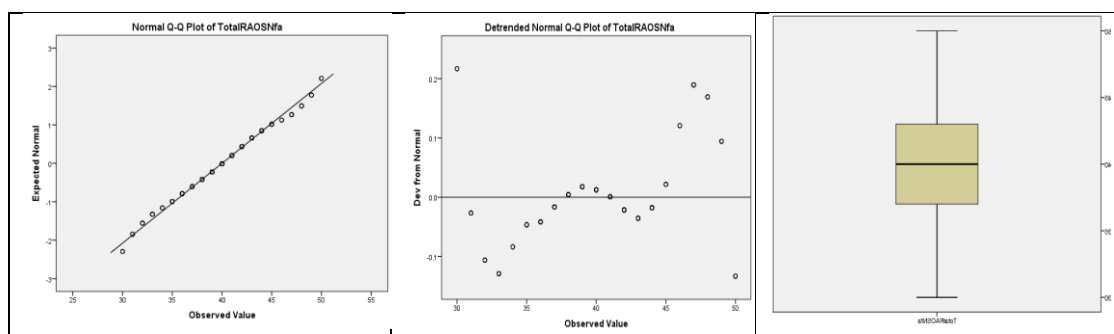
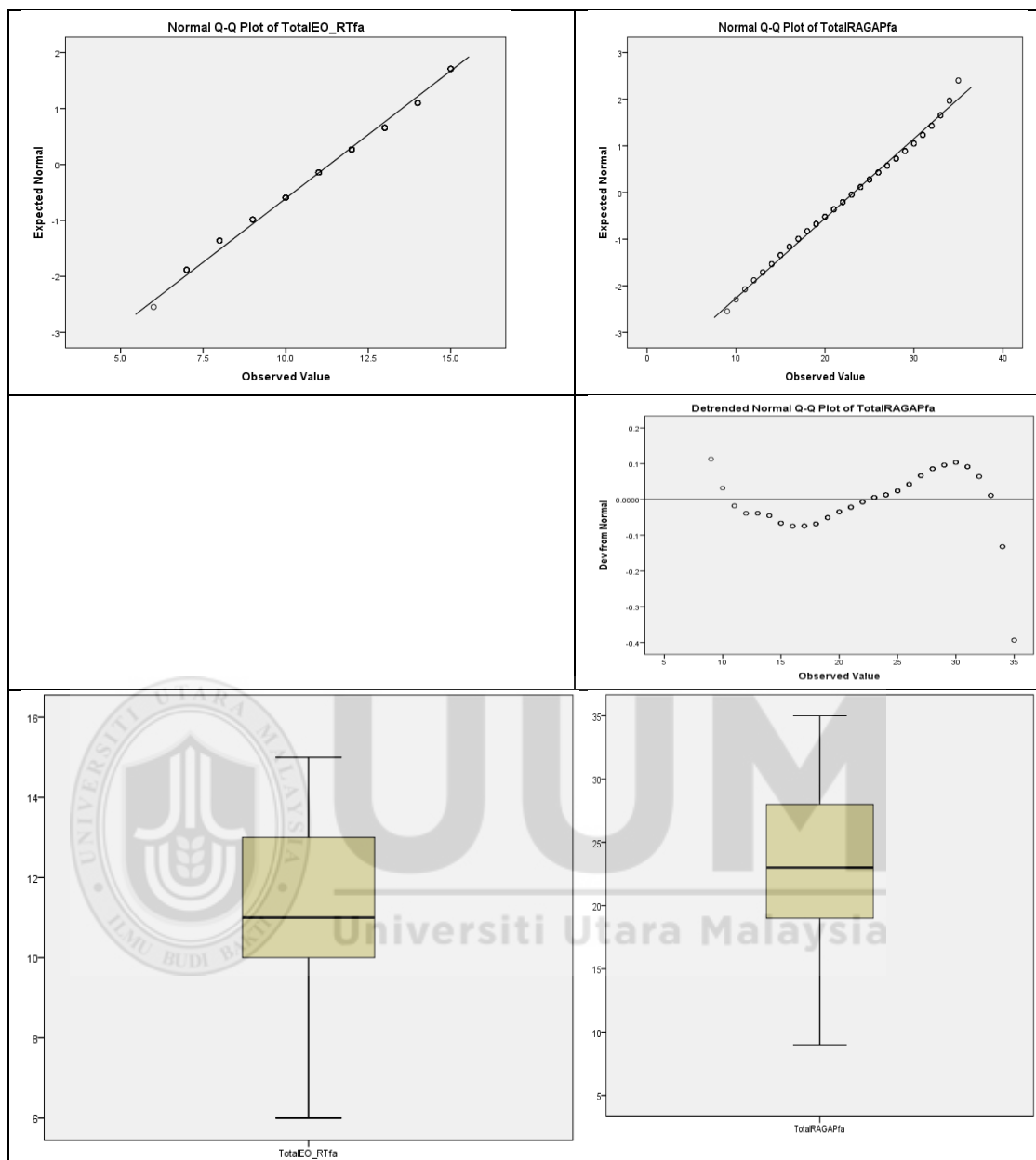
|              |                                  |             |         |        |
|--------------|----------------------------------|-------------|---------|--------|
| TotalEO_RTfa | Mean                             |             | 11.3279 | .16202 |
|              | 95% Confidence Interval for Mean | Lower Bound | 11.0082 |        |
|              |                                  | Upper Bound | 11.6476 |        |
|              | 5% Trimmed Mean                  |             | 11.3695 |        |
|              | Median                           |             | 11.0000 |        |
|              | Variance                         |             | 4.804   |        |
|              | Std. Deviation                   |             | 2.19180 |        |
|              | Minimum                          |             | 6.00    |        |
|              | Maximum                          |             | 15.00   |        |
|              | Range                            |             | 9.00    |        |
|              | Interquartile Range              |             | 3.00    |        |
|              | Skewness                         |             | -.160   | .180   |
|              | Kurtosis                         |             | -.681   | .357   |
| TotalRAGAPfa | Mean                             |             | 23.2459 | .43263 |
|              | 95% Confidence Interval for Mean | Lower Bound | 22.3923 |        |
|              |                                  | Upper Bound | 24.0995 |        |
|              | 5% Trimmed Mean                  |             | 23.3027 |        |
|              | Median                           |             | 23.0000 |        |
|              | Variance                         |             | 34.252  |        |
|              | Std. Deviation                   |             | 5.85255 |        |
|              | Minimum                          |             | 9.00    |        |
|              | Maximum                          |             | 35.00   |        |
|              | Range                            |             | 26.00   |        |
|              | Interquartile Range              |             | 9.00    |        |
|              | Skewness                         |             | -.088   | .180   |
|              | Kurtosis                         |             | -.630   | .357   |
| TotalRAOSNfa | Mean                             |             | 40.0055 | .35591 |
|              | 95% Confidence Interval for Mean | Lower Bound | 39.3032 |        |
|              |                                  | Upper Bound | 40.7077 |        |
|              | 5% Trimmed Mean                  |             | 39.9939 |        |
|              | Median                           |             | 40.0000 |        |
|              | Variance                         |             | 23.181  |        |
|              | Std. Deviation                   |             | 4.81470 |        |
|              | Minimum                          |             | 30.00   |        |
|              | Maximum                          |             | 50.00   |        |
|              | Range                            |             | 20.00   |        |
|              | Interquartile Range              |             | 6.00    |        |
|              | Skewness                         |             | .038    | .180   |
|              | Kurtosis                         |             | -.506   | .357   |

## Q-Q Plot, Boxplot









# LINEARITY & HOMOSCEDASTICITY TEST

## ENTREPRENEURIAL STRATEGY OF ENTREPRENEURIAL BRICOLAGE (ESEB)

**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .133 <sup>a</sup> | .018     | .012              | 3.56105                    |

a. Predictors: (Constant), TotalESEBfa

b. Dependent Variable: TotalBPfa

**ANOVA<sup>a</sup>**

| Model |            | Sum of Squares | df  | Mean Square | F     | Sig.              |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1     | Regression | 41.025         | 1   | 41.025      | 3.235 | .074 <sup>b</sup> |
|       | Residual   | 2295.281       | 181 | 12.681      |       |                   |
|       | Total      | 2336.306       | 182 |             |       |                   |

a. Dependent Variable: TotalBPfa

b. Predictors: (Constant), TotalESEBfa

**Coefficients<sup>a</sup>**

| Model |             | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|-------------|-----------------------------|------------|---------------------------|-------|------|
|       |             | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant)  | 18.152                      | 2.234      |                           | 8.127 | .000 |
|       | TotalESEBfa | .166                        | .093       | .133                      | 1.799 | .074 |

a. Dependent Variable: TotalBPfa

**Residuals Statistics<sup>a</sup>**

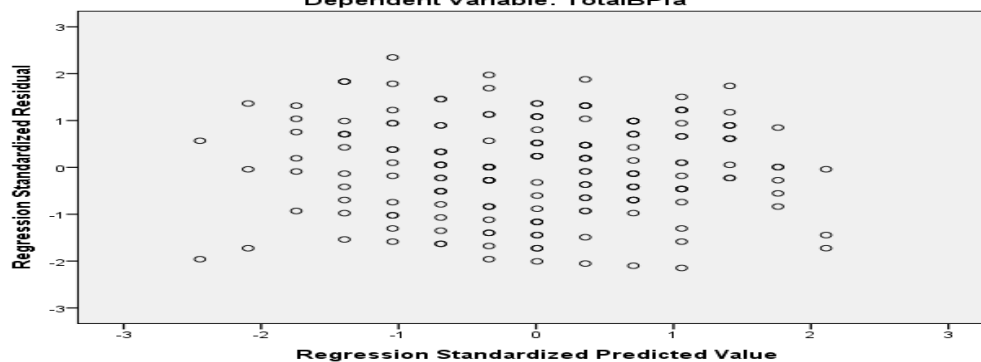
|                      | Minimum  | Maximum | Mean    | Std. Deviation | N   |
|----------------------|----------|---------|---------|----------------|-----|
| Predicted Value      | 20.9810  | 23.1440 | 22.1421 | .47478         | 183 |
| Residual             | -7.64487 | 8.35344 | .00000  | 3.55126        | 183 |
| Std. Predicted Value | -2.445   | 2.110   | .000    | 1.000          | 183 |
| Std. Residual        | -2.147   | 2.346   | .000    | .997           | 183 |

a. Dependent Variable: TotalBPfa

## Charts

**Scatterplot**

**Dependent Variable: TotalBPfa**



# ENTREPRENEURIAL STRATEGY OF ENTREPRENEURIAL ORIENTATION (ESEO)

**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .188 <sup>a</sup> | .035     | .030              | 3.52867                    |

a. Predictors: (Constant), TotalEO\_INNOfa

b. Dependent Variable: TotalBPfa

**ANOVA<sup>a</sup>**

| Model |            | Sum of Squares | df  | Mean Square | F     | Sig.              |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1     | Regression | 82.582         | 1   | 82.582      | 6.632 | .011 <sup>b</sup> |
|       | Residual   | 2253.724       | 181 | 12.452      |       |                   |
|       | Total      | 2336.306       | 182 |             |       |                   |

a. Dependent Variable: TotalBPfa

b. Predictors: (Constant), TotalEO\_INNOfa

**Residuals Statistics<sup>a</sup>**

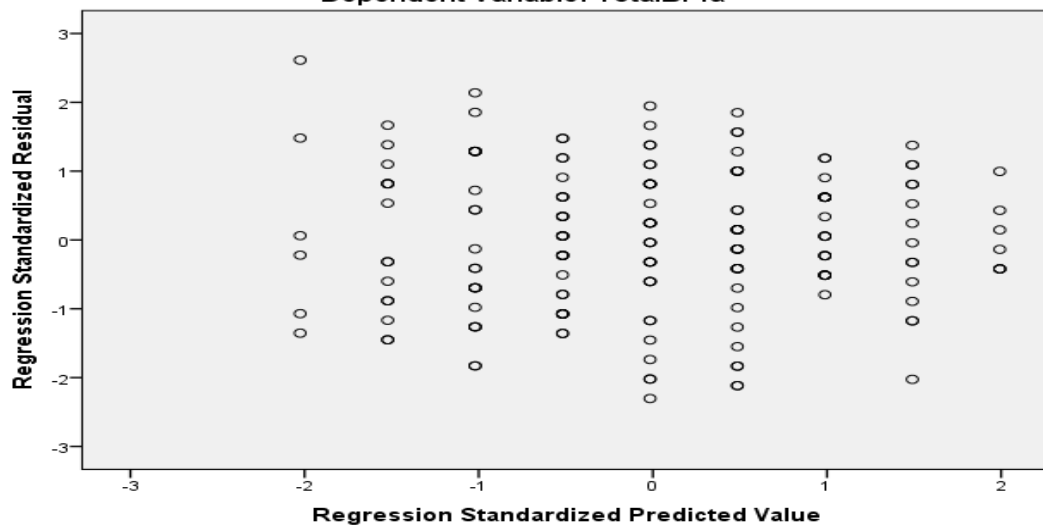
|                      | Minimum  | Maximum | Mean    | Std. Deviation | N   |
|----------------------|----------|---------|---------|----------------|-----|
| Predicted Value      | 20.7780  | 23.4840 | 22.1421 | .67361         | 183 |
| Residual             | -8.13099 | 9.22200 | .00000  | 3.51896        | 183 |
| Std. Predicted Value | -2.025   | 1.992   | .000    | 1.000          | 183 |
| Std. Residual        | -2.304   | 2.613   | .000    | .997           | 183 |

a. Dependent Variable: TotalBPfa

## Charts

**Scatterplot**

**Dependent Variable: TotalBPfa**



**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .491 <sup>a</sup> | .241     | .237              | 3.12926                    |

a. Predictors: (Constant), TotalEO\_PROfa

b. Dependent Variable: TotalBPfa

#### ANOVA<sup>a</sup>

| Model |            | Sum of Squares | df  | Mean Square | F      | Sig.              |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1     | Regression | 563.900        | 1   | 563.900     | 57.586 | .000 <sup>b</sup> |
|       | Residual   | 1772.406       | 181 | 9.792       |        |                   |
|       | Total      | 2336.306       | 182 |             |        |                   |

a. Dependent Variable: TotalBPfa

b. Predictors: (Constant), TotalEO\_PROfa

#### Coefficients<sup>a</sup>

| Model |               | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|---------------|-----------------------------|------------|---------------------------|-------|------|
|       |               | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant)    | 12.176                      | 1.334      |                           | 9.130 | .000 |
|       | TotalEO_PROfa | .867                        | .114       | .491                      | 7.589 | .000 |

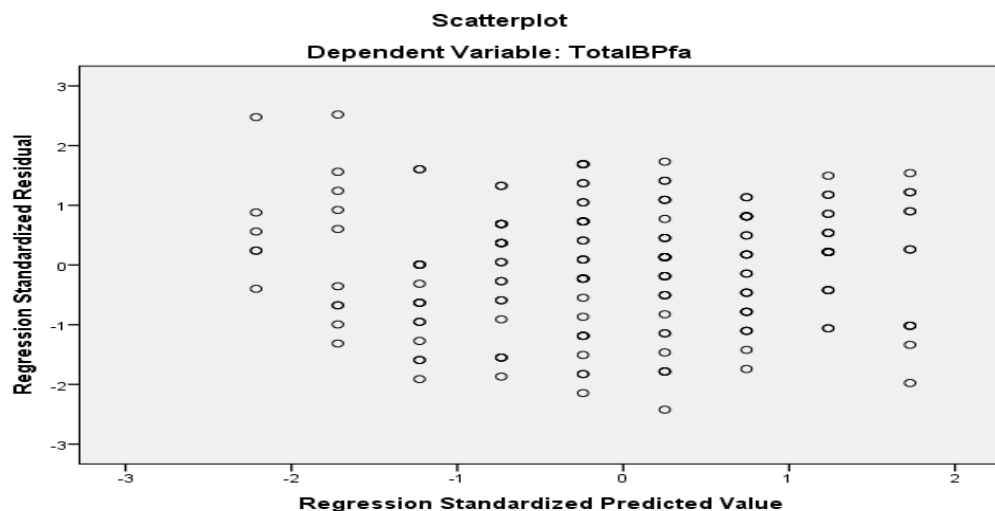
a. Dependent Variable: TotalBPfa

#### Residuals Statistics<sup>a</sup>

|                      | Minimum  | Maximum | Mean    | Std. Deviation | N   |
|----------------------|----------|---------|---------|----------------|-----|
| Predicted Value      | 18.2465  | 25.1846 | 22.1421 | 1.76021        | 183 |
| Residual             | -7.58281 | 7.88620 | .00000  | 3.12066        | 183 |
| Std. Predicted Value | -2.213   | 1.728   | .000    | 1.000          | 183 |
| Std. Residual        | -2.423   | 2.520   | .000    | .997           | 183 |

a. Dependent Variable: TotalBPfa

## Charts



**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .226 <sup>a</sup> | .051     | .046              | 3.50009                    |

a. Predictors: (Constant), TotalEO\_RTfa

b. Dependent Variable: TotalBPfa

**ANOVA<sup>a</sup>**

| Model |            | Sum of Squares | df  | Mean Square | F     | Sig.              |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1     | Regression | 118.938        | 1   | 118.938     | 9.709 | .002 <sup>b</sup> |
|       | Residual   | 2217.368       | 181 | 12.251      |       |                   |
|       | Total      | 2336.306       | 182 |             |       |                   |

a. Dependent Variable: TotalBPfa

b. Predictors: (Constant), TotalEO\_RTfa

**Coefficients<sup>a</sup>**

| Model |              | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|-------|--------------|-----------------------------|------------|---------------------------|--------|------|
|       |              | B                           | Std. Error | Beta                      |        |      |
| 1     | (Constant)   | 17.964                      | 1.366      |                           | 13.155 | .000 |
|       | TotalEO_RTfa | .369                        | .118       | .226                      | 3.116  | .002 |

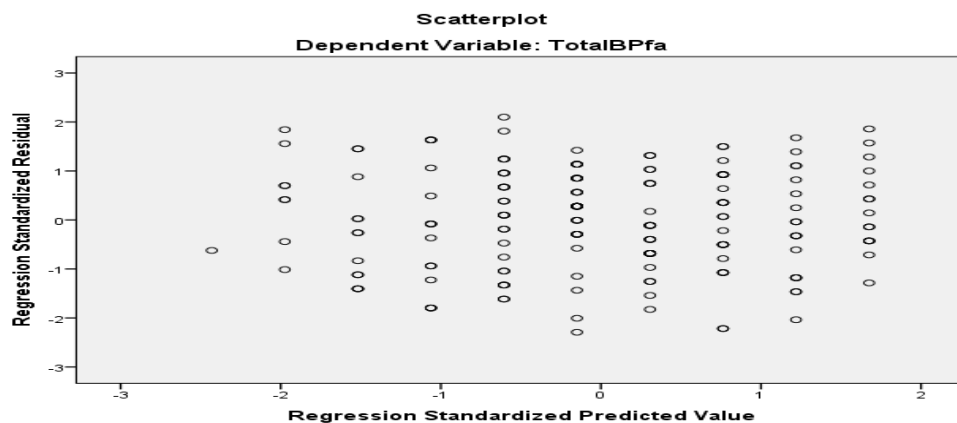
a. Dependent Variable: TotalBPfa

**Residuals Statistics<sup>a</sup>**

|                      | Minimum  | Maximum | Mean    | Std. Deviation | N   |
|----------------------|----------|---------|---------|----------------|-----|
| Predicted Value      | 20.1770  | 23.4965 | 22.1421 | .80840         | 183 |
| Residual             | -8.02115 | 7.34768 | .00000  | 3.49046        | 183 |
| Std. Predicted Value | -2.431   | 1.675   | .000    | 1.000          | 183 |
| Std. Residual        | -2.292   | 2.099   | .000    | .997           | 183 |

a. Dependent Variable: TotalBPfa

## Charts



## RESOURCE ACQUISITION GOVERNMENT ASSISTANCE PROGRAM (RAGAP)

**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .151 <sup>a</sup> | .023     | .018              | 3.55135                    |

a. Predictors: (Constant), TotalRAGAPfa

b. Dependent Variable: TotalBPfa

**ANOVA<sup>a</sup>**

| Model |            | Sum of Squares | df  | Mean Square | F     | Sig.              |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1     | Regression | 53.518         | 1   | 53.518      | 4.243 | .041 <sup>b</sup> |
|       | Residual   | 2282.788       | 181 | 12.612      |       |                   |
|       | Total      | 2336.306       | 182 |             |       |                   |

a. Dependent Variable: TotalBPfa

b. Predictors: (Constant), TotalRAGAPfa

**Coefficients<sup>a</sup>**

| Model |              | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|-------|--------------|-----------------------------|------------|---------------------------|--------|------|
|       |              | B                           | Std. Error | Beta                      |        |      |
| 1     | (Constant)   | 19.988                      | 1.078      |                           | 18.541 | .000 |
|       | TotalRAGAPfa | .093                        | .045       | .151                      | 2.060  | .041 |

a. Dependent Variable: TotalBPfa

**Residuals Statistics<sup>a</sup>**

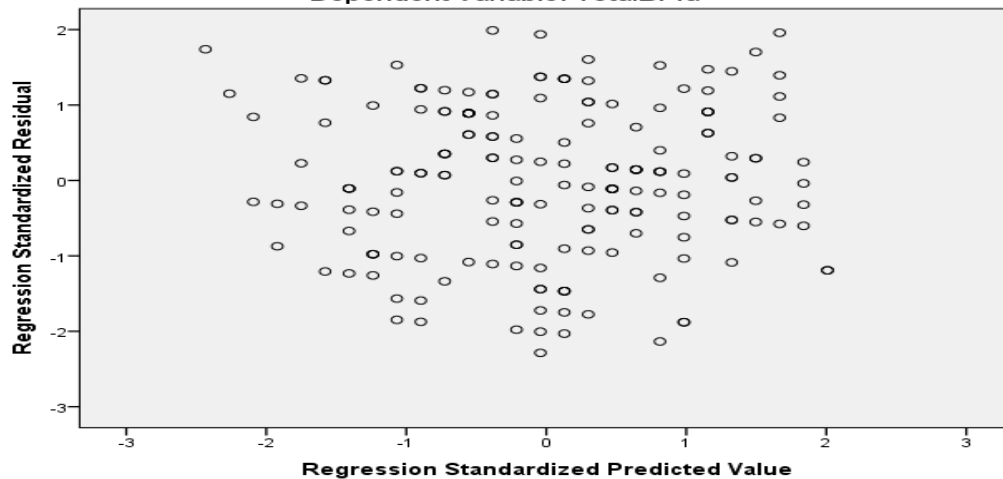
|                      | Minimum  | Maximum | Mean    | Std. Deviation | N   |
|----------------------|----------|---------|---------|----------------|-----|
| Predicted Value      | 20.8221  | 23.2312 | 22.1421 | .54227         | 183 |
| Residual             | -8.11929 | 7.06602 | .00000  | 3.54158        | 183 |
| Std. Predicted Value | -2.434   | 2.008   | .000    | 1.000          | 183 |
| Std. Residual        | -2.286   | 1.990   | .000    | .997           | 183 |

a. Dependent Variable: TotalBPfa

## Charts

**Scatterplot**

**Dependent Variable: TotalBPfa**



## RESOURCES ACQUISITION of ONLINE SOCIAL NETWORKING ADOPTION (RAOSN)

**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .149 <sup>a</sup> | .022     | .017              | 3.55245                    |

a. Predictors: (Constant), TotalRAOSNfa

b. Dependent Variable: TotalBPfa

**ANOVA<sup>a</sup>**

| Model |            | Sum of Squares | df  | Mean Square | F     | Sig.              |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1     | Regression | 52.104         | 1   | 52.104      | 4.129 | .044 <sup>b</sup> |
|       | Residual   | 2284.202       | 181 | 12.620      |       |                   |
|       | Total      | 2336.306       | 182 |             |       |                   |

a. Dependent Variable: TotalBPfa

b. Predictors: (Constant), TotalRAOSNfa

**Coefficients<sup>a</sup>**

| Model |              | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|--------------|-----------------------------|------------|---------------------------|-------|------|
|       |              | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant)   | 17.696                      | 2.204      |                           | 8.030 | .000 |
|       | TotalRAOSNfa | .111                        | .055       | .149                      | 2.032 | .044 |

a. Dependent Variable: TotalBPfa

**Residuals Statistics<sup>a</sup>**

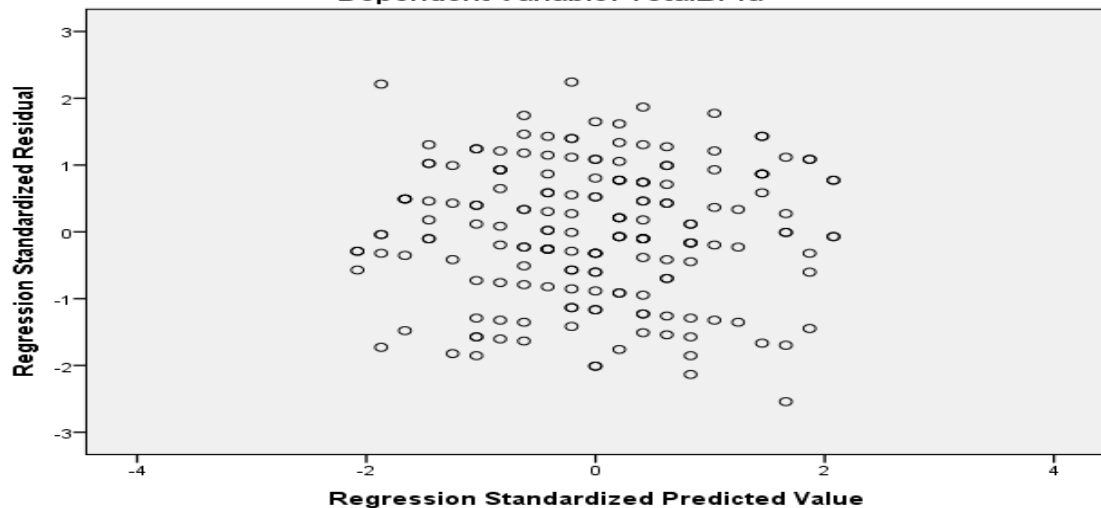
|                      | Minimum  | Maximum | Mean    | Std. Deviation | N   |
|----------------------|----------|---------|---------|----------------|-----|
| Predicted Value      | 21.0302  | 23.2528 | 22.1421 | .53506         | 183 |
| Residual             | -9.03051 | 7.96966 | .00000  | 3.54268        | 183 |
| Std. Predicted Value | -2.078   | 2.076   | .000    | 1.000          | 183 |
| Std. Residual        | -2.542   | 2.243   | .000    | .997           | 183 |

a. Dependent Variable: TotalBPfa

## Charts

**Scatterplot**

**Dependent Variable: TotalBPfa**



## MULTICOLLINEARITY TEST

Model Summary<sup>b</sup>

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1     | .553 <sup>a</sup> | .306     | .282              | 3.03626                    | 1.916         |

a. Predictors: (Constant), TotalRAOSNfa, TotalEO\_RTfa, TotalESEBfa, TotalRAGAPfa, TotalEO\_INNOfa, TotalEO\_PROfa

b. Dependent Variable: TotalBPfa

Coefficients<sup>a</sup>

| Model |                | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. | Collinearity Statistics |       |
|-------|----------------|-----------------------------|------------|---------------------------|-------|------|-------------------------|-------|
|       |                | B                           | Std. Error | Beta                      |       |      | Tolerance               | VIF   |
| 1     | (Constant)     | -.151                       | 3.472      |                           | -.044 | .965 |                         |       |
|       | TotalESEBfa    | .162                        | .080       | .129                      | 2.036 | .043 | .982                    | 1.019 |
|       | TotalEO_INNOfa | .170                        | .117       | .095                      | 1.460 | .146 | .940                    | 1.063 |
|       | TotalEO_PROfa  | .760                        | .118       | .431                      | 6.435 | .000 | .881                    | 1.135 |
|       | TotalEO_RTfa   | .118                        | .109       | .072                      | 1.078 | .283 | .887                    | 1.128 |
|       | TotalRAGAPfa   | .080                        | .039       | .130                      | 2.041 | .043 | .970                    | 1.031 |
|       | TotalRAOSNfa   | .115                        | .048       | .155                      | 2.420 | .017 | .964                    | 1.037 |

a. Dependent Variable: TotalBPfa



**MULTIVARIATE ANALYSIS**  
**BIVARIATE ANALYSIS**

**Correlations**

|                |                     | TotalBPfa | TotalESEBfa | TotalEO_INNOfa | TotalEO_PROfa | TotalEO_RTfa | TotalRAGAPfa | TotalRAOSNfa |
|----------------|---------------------|-----------|-------------|----------------|---------------|--------------|--------------|--------------|
| TotalBPfa      | Pearson Correlation | 1         | .133*       | .188**         | .491**        | .226**       | .151*        | .149*        |
|                | Sig. (1-tailed)     |           | .037        | .005           | .000          | .001         | .020         | .022         |
|                | N                   | 183       | 183         | 183            | 183           | 183          | 183          | 183          |
| TotalESEBfa    | Pearson Correlation | .133*     | 1           | -.002          | .050          | .031         | -.018        | -.116        |
|                | Sig. (1-tailed)     | .037      |             | .490           | .250          | .338         | .406         | .059         |
|                | N                   | 183       | 183         | 183            | 183           | 183          | 183          | 183          |
| TotalEO_INNOfa | Pearson Correlation | .188**    | -.002       | 1              | .193**        | .151*        | .093         | -.080        |
|                | Sig. (1-tailed)     | .005      | .490        |                | .004          | .021         | .106         | .140         |
|                | N                   | 183       | 183         | 183            | 183           | 183          | 183          | 183          |
| TotalEO_PROfa  | Pearson Correlation | .491**    | .050        | .193**         | 1             | .290**       | .034         | .069         |
|                | Sig. (1-tailed)     | .000      | .250        | .004           |               | .000         | .325         | .177         |
|                | N                   | 183       | 183         | 183            | 183           | 183          | 183          | 183          |
| TotalEO_RTfa   | Pearson Correlation | .226**    | .031        | .151*          | .290**        | 1            | .146*        | -.054        |
|                | Sig. (1-tailed)     | .001      | .338        | .021           | .000          |              | .024         | .235         |
|                | N                   | 183       | 183         | 183            | 183           | 183          | 183          | 183          |
| TotalRAGAPfa   | Pearson Correlation | .151*     | -.018       | .093           | .034          | .146*        | 1            | -.067        |
|                | Sig. (1-tailed)     | .020      | .406        | .106           | .325          | .024         |              | .184         |
|                | N                   | 183       | 183         | 183            | 183           | 183          | 183          | 183          |
| TotalRAOSNfa   | Pearson Correlation | .149*     | -.116       | -.080          | .069          | -.054        | -.067        | 1            |
|                | Sig. (1-tailed)     | .022      | .059        | .140           | .177          | .235         | .184         |              |
|                | N                   | 183       | 183         | 183            | 183           | 183          | 183          | 183          |

\*. Correlation is significant at the 0.05 level (1-tailed).

\*\*. Correlation is significant at the 0.01 level (1-tailed).

## MULTIVARIATE REGRESSION ANALYSIS

**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1     | .518 <sup>a</sup> | .268     | .252              | 3.09958                    | .268              | 16.295   | 4   | 178 | .000          | 1.851         |

a. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa

b. Dependent Variable: TBPfa

**Coefficients<sup>a</sup>**

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|
|       |            | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant) | 6.596                       | 2.621      |                           | 2.517 | .013 |
|       | TEBfa      | .135                        | .081       | .108                      | 1.679 | .095 |
|       | TINNOfa    | .162                        | .118       | .090                      | 1.372 | .172 |
|       | TEOPROfa   | .786                        | .120       | .445                      | 6.558 | .000 |
|       | TRTfa      | .130                        | .110       | .080                      | 1.183 | .238 |

a. Dependent Variable: TBPfa

## MODERATOR ANALYSIS

### MODERATOR: GOVERNMENT ASSISTANCE PROGRAM

### ENTREPRENEURIAL BRICOLAGE – NASCENT VENTURE BUSINESS PERFORMANCE

Model Summary<sup>d</sup>

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |
| 1     | .133 <sup>a</sup> | .018     | .012              | 3.56105                    | .018              | 3.235    | 1   | 181 | .074          |
| 2     | .203 <sup>b</sup> | .041     | .031              | 3.52772                    | .024              | 4.437    | 1   | 180 | .037          |
| 3     | .209 <sup>c</sup> | .043     | .027              | 3.53334                    | .002              | .428     | 1   | 179 | .514          |

a. Predictors: (Constant), TEBfa

b. Predictors: (Constant), TEBfa, TGAPfa

c. Predictors: (Constant), TEBfa, TGAPfa, Meb\_gap

d. Dependent Variable: TBPfa

Coefficients<sup>a</sup>

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients | T     | Sig. | 95.0% Confidence Interval for B |             | Correlations |         |       |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|---------------------------------|-------------|--------------|---------|-------|
|       |            | B                           | Std. Error | Beta                      |       |      | Lower Bound                     | Upper Bound | Zero-order   | Partial | Part  |
| 1     | (Constant) | 18.152                      | 2.234      |                           | 8.127 | .000 | 13.745                          | 22.560      |              |         |       |
|       | TEBfa      | .166                        | .093       | .133                      | 1.799 | .074 | -.016                           | .349        | .133         | .133    | .133  |
| 2     | (Constant) | 15.882                      | 2.461      |                           | 6.453 | .000 | 11.025                          | 20.739      |              |         |       |
|       | TEBfa      | .170                        | .092       | .135                      | 1.853 | .066 | -.011                           | .351        | .133         | .137    | .135  |
|       | TGAPfa     | .094                        | .045       | .154                      | 2.106 | .037 | .006                            | .182        | .151         | .155    | .154  |
| 3     | (Constant) | 10.222                      | 8.993      |                           | 1.137 | .257 | -7.523                          | 27.968      |              |         |       |
|       | TEBfa      | .409                        | .377       | .326                      | 1.086 | .279 | -.334                           | 1.152       | .133         | .081    | .079  |
|       | TGAPfa     | .341                        | .380       | .557                      | .897  | .371 | -.409                           | 1.092       | .151         | .067    | .066  |
|       | Meb_gap    | -.010                       | .016       | -.446                     | -.654 | .514 | -.042                           | .021        | .188         | -.049   | -.048 |

a. Dependent Variable: TBPfa

# **MACRO-PROCESS PROCEDURE:**

\*\*\*\*\* PROCESS Procedure for SPSS Release 2.16.3 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D.      [www.afhayes.com](http://www.afhayes.com)  
Documentation available in Hayes (2013). [www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

\*\*\*\*\*

Model = 1  
Y = TBPfa  
X = TEBfa  
M = TGAPfa

Sample size  
183

\*\*\*\*\*

Outcome: TBPfa

## Model Summary

| R     | R-sq  | MSE     | F      | df1    | df2      | p     |
|-------|-------|---------|--------|--------|----------|-------|
| .2085 | .0435 | 12.4845 | 2.7123 | 3.0000 | 179.0000 | .0464 |

## Model

| coeff    | se      | t      | p      | LLCI  | ULCI    |         |
|----------|---------|--------|--------|-------|---------|---------|
| constant | 10.2225 | 8.9928 | 1.1367 | .2572 | -7.5230 | 27.9679 |
| TGAPfa   | .3413   | .3803  | .8974  | .3707 | -.4092  | 1.0918  |
| TEBfa    | .4088   | .3766  | 1.0856 | .2791 | -.3343  | 1.1519  |
| int_1    | -.0104  | .0160  | -.6544 | .5137 | -.0419  | .0210   |

## Product terms key:

int\_1      TEBfa      X      TGAPfa

## R-square increase due to interaction(s):

| R2-chng | F     | df1   | df2    | p        |       |
|---------|-------|-------|--------|----------|-------|
| int_1   | .0023 | .4283 | 1.0000 | 179.0000 | .5137 |

\*\*\*\*\*

## Conditional effect of X on Y at values of the moderator(s):

| TGAPfa  | Effect | se    | t      | p     | LLCI   | ULCI  |
|---------|--------|-------|--------|-------|--------|-------|
| 17.3933 | .2272  | .1270 | 1.7896 | .0752 | -.0233 | .4778 |
| 23.2459 | .1661  | .0920 | 1.8060 | .0726 | -.0154 | .3476 |
| 29.0985 | .1050  | .1350 | .7776  | .4379 | -.1615 | .3715 |

Values for quantitative moderators are the mean and plus/minus one SD from mean.

Values for dichotomous moderators are the two values of the moderator.

----- END MATRIX -----

# INNOVATIVENESS (ENTREPRENEURIAL ORIENTATION) – NASCENT VENTURE BUSINESS PERFORMANCE

Model Summary<sup>d</sup>

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1     | .518 <sup>a</sup> | .268     | .252              | 3.09958                    | .268              | 16.295   | 4   | 178 | .000          | 1.892         |
| 2     | .531 <sup>b</sup> | .282     | .262              | 3.07764                    | .014              | 3.546    | 1   | 177 | .061          |               |
| 3     | .534 <sup>c</sup> | .285     | .261              | 3.08094                    | .003              | .621     | 1   | 176 | .432          |               |

a. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa

b. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TGAPfa

c. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TGAPfa, Minno\_gap

d. Dependent Variable: TBPfa

Coefficients<sup>a</sup>

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients |  | t     | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--|-------|------|
|       |            | B                           | Std. Error | Beta                      |  |       |      |
| 1     | (Constant) | 6.596                       | 2.621      |                           |  | 2.517 | .013 |
|       | TEBfa      | .135                        | .081       | .108                      |  | 1.679 | .095 |
|       | TINNOfa    | .162                        | .118       | .090                      |  | 1.372 | .172 |
|       | TEOPROfa   | .786                        | .120       | .445                      |  | 6.558 | .000 |
|       | TRTfa      | .130                        | .110       | .080                      |  | 1.183 | .238 |
| 2     | (Constant) | 5.238                       | 2.700      |                           |  | 1.940 | .054 |
|       | TEBfa      | .139                        | .080       | .110                      |  | 1.730 | .085 |
|       | TINNOfa    | .146                        | .118       | .081                      |  | 1.238 | .217 |
|       | TEOPROfa   | .791                        | .119       | .448                      |  | 6.641 | .000 |
|       | TRTfa      | .102                        | .110       | .062                      |  | .925  | .356 |
| 3     | TGAPfa     | .074                        | .040       | .122                      |  | 1.883 | .061 |
|       | (Constant) | 1.774                       | 5.161      |                           |  | .344  | .731 |
|       | TEBfa      | .131                        | .081       | .105                      |  | 1.628 | .105 |
|       | TINNOfa    | .478                        | .438       | .266                      |  | 1.091 | .277 |
|       | TEOPROfa   | .789                        | .119       | .447                      |  | 6.620 | .000 |
|       | TRTfa      | .105                        | .111       | .064                      |  | .952  | .342 |
|       | TGAPfa     | .234                        | .207       | .382                      |  | 1.134 | .259 |
|       | Minno_gap  | -.015                       | .019       | -.338                     |  | -.788 | .432 |

a. Dependent Variable: TBPfa

# MACRO-PROCESS PROCEDURE:

\*\*\*\*\* PROCESS Procedure for SPSS Release 2.16.3 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D.                      www.afhayes.com  
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

\*\*\*\*\*

Model = 1  
Y = TBPfa  
X = TINNOfa  
M = TGAPfa

Sample size  
183

\*\*\*\*\*

Outcome: TBPfa

## Model Summary

|   | R     | R-sq  | MSE     | F      | df1    | df2      |
|---|-------|-------|---------|--------|--------|----------|
| p | .2404 | .0578 | 12.2974 | 3.6611 | 3.0000 | 179.0000 |
|   | .0135 |       |         |        |        |          |

## Model

|          | coeff   | se     | t      | p     | LLCI   | ULCI    |
|----------|---------|--------|--------|-------|--------|---------|
| constant | 11.9974 | 5.4773 | 2.1904 | .0298 | 1.1890 | 22.8057 |
| TGAPfa   | .2918   | .2337  | 1.2484 | .2135 | -.1694 | .7529   |
| TINNOfa  | .7505   | .4948  | 1.5167 | .1311 | -.2259 | 1.7270  |
| int_1    | -.0191  | .0210  | -.9112 | .3634 | -.0604 | .0223   |

## Product terms key:

int\_1      TINNOfa      X      TGAPfa

## R-square increase due to interaction(s):

|       | R2-chng | F     | df1    | df2      | p     |
|-------|---------|-------|--------|----------|-------|
| int_1 | .0044   | .8304 | 1.0000 | 179.0000 | .3634 |

\*\*\*\*\*

## Conditional effect of X on Y at values of the moderator(s):

| TGAPfa  | Effect | se    | t      | p     | LLCI   |
|---------|--------|-------|--------|-------|--------|
| ULCI    |        |       |        |       |        |
| 17.3933 | .4184  | .1729 | 2.4205 | .0165 | .0773  |
| .7595   |        |       |        |       |        |
| 23.2459 | .3066  | .1315 | 2.3324 | .0208 | .0472  |
| .5661   |        |       |        |       |        |
| 29.0985 | .1949  | .1865 | 1.0451 | .2974 | -.1731 |
| .5629   |        |       |        |       |        |

Values for quantitative moderators are the mean and plus/minus one SD from mean.

Values for dichotomous moderators are the two values of the moderator.

----- END MATRIX -----

**PROACTIVENESS (ENTREPRENEURIAL ORIENTATION) – NASCENT VENTURE BUSINESS PERFORMANCE**

**Model Summary<sup>d</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1     | .518 <sup>a</sup> | .268     | .252              | 3.09958                    | .268              | 16.295   | 4   | 178 | .000          | 1.897         |
| 2     | .531 <sup>b</sup> | .282     | .262              | 3.07764                    | .014              | 3.546    | 1   | 177 | .061          |               |
| 3     | .543 <sup>c</sup> | .295     | .271              | 3.05881                    | .013              | 3.186    | 1   | 176 | .076          |               |

a. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa

b. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TGAPfa

c. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TGAPfa, mPRO\_GAP

d. Dependent Variable: TBPfa

**Coefficients<sup>a</sup>**

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients |  | t      | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--|--------|------|
|       |            | B                           | Std. Error | Beta                      |  |        |      |
| 1     | (Constant) | 6.596                       | 2.621      |                           |  | 2.517  | .013 |
|       | TEBfa      | .135                        | .081       | .108                      |  | 1.679  | .095 |
|       | TINNOfa    | .162                        | .118       | .090                      |  | 1.372  | .172 |
|       | TEOPROfa   | .786                        | .120       | .445                      |  | 6.558  | .000 |
|       | TRTfa      | .130                        | .110       | .080                      |  | 1.183  | .238 |
| 2     | (Constant) | 5.238                       | 2.700      |                           |  | 1.940  | .054 |
|       | TEBfa      | .139                        | .080       | .110                      |  | 1.730  | .085 |
|       | TINNOfa    | .146                        | .118       | .081                      |  | 1.238  | .217 |
|       | TEOPROfa   | .791                        | .119       | .448                      |  | 6.641  | .000 |
|       | TRTfa      | .102                        | .110       | .062                      |  | .925   | .356 |
|       | TGAPfa     | .074                        | .040       | .122                      |  | 1.883  | .061 |
| 3     | (Constant) | -4.502                      | 6.081      |                           |  | -.740  | .460 |
|       | TEBfa      | .121                        | .080       | .097                      |  | 1.513  | .132 |
|       | TINNOfa    | .127                        | .117       | .071                      |  | 1.082  | .281 |
|       | TEOPROfa   | 1.686                       | .516       | .955                      |  | 3.271  | .001 |
|       | TRTfa      | .111                        | .110       | .068                      |  | 1.010  | .314 |
|       | TGAPfa     | .489                        | .236       | .799                      |  | 2.076  | .039 |
|       | mPRO_GAP   | -.036                       | .020       | -.867                     |  | -1.785 | .076 |

a. Dependent Variable: TBPfa

# MACRO-PROCESS PROCEDURE:

\*\*\*\*\* PROCESS Procedure for SPSS Release 2.16.3 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D.      www.afhayes.com  
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

\*\*\*\*\*

Model = 1  
Y = TBPfa  
X = TEOPROfa  
M = TGAPfa

Sample size  
183

\*\*\*\*\*

Outcome: TBPfa

## Model Summary

| R     | R-sq  | MSE    | F       | df1    | df2      | p     |
|-------|-------|--------|---------|--------|----------|-------|
| .5256 | .2763 | 9.4460 | 22.7775 | 3.0000 | 179.0000 | .0000 |

## Model

|          | coeff   | se     | t       | p     | LLCI     | ULCI    |
|----------|---------|--------|---------|-------|----------|---------|
| constant | -1.2381 | 5.9083 | -.2096  | .8343 | -12.8969 | 10.4207 |
| TGAPfa   | .5520   | .2341  | 2.3584  | .0194 | .0901    | 1.0139  |
| TEOPROfa | 1.8704  | .5097  | 3.6696  | .0003 | .8646    | 2.8762  |
| int_1    | -.0409  | .0201  | -2.0339 | .0434 | -.0806   | -.0012  |

## Product terms key:

int\_1      TEOPROfa      X      TGAPfa

## R-square increase due to interaction(s):

|       | R2-chng | F      | df1    | df2      | p     |
|-------|---------|--------|--------|----------|-------|
| int_1 | .0167   | 4.1366 | 1.0000 | 179.0000 | .0434 |

\*\*\*\*\*

## Conditional effect of X on Y at values of the moderator(s):

| TGAPfa  | Effect | se    | t      | p     | LLCI  | ULCI   |
|---------|--------|-------|--------|-------|-------|--------|
| 17.3933 | 1.1587 | .1852 | 6.2569 | .0000 | .7933 | 1.5241 |
| 23.2459 | .9192  | .1161 | 7.9162 | .0000 | .6901 | 1.1484 |
| 29.0985 | .6798  | .1428 | 4.7593 | .0000 | .3979 | .9616  |

Values for quantitative moderators are the mean and plus/minus one SD from mean.  
Values for dichotomous moderators are the two values of the moderator.

----- END MATRIX -----



# **RISKINESS (ENTREPRENEURIAL ORIENTATION) – NASCENT VENTURE BUSINESS PERFORMANCE**

**Model Summary<sup>d</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1     | .518 <sup>a</sup> | .268     | .252              | 3.09958                    | .268              | 16.295   | 4   | 178 | .000          | 1.895         |
| 2     | .531 <sup>b</sup> | .282     | .262              | 3.07764                    | .014              | 3.546    | 1   | 177 | .061          |               |
| 3     | .538 <sup>c</sup> | .289     | .265              | 3.07133                    | .007              | 1.728    | 1   | 176 | .190          |               |

a. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa

b. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TGAPfa

c. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TGAPfa, Mrt\_gap

d. Dependent Variable: TBPfa

**Coefficients<sup>a</sup>**

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients |  | t      | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--|--------|------|
|       |            | B                           | Std. Error | Beta                      |  |        |      |
| 1     | (Constant) | 6.596                       | 2.621      |                           |  | 2.517  | .013 |
|       | TEBfa      | .135                        | .081       | .108                      |  | 1.679  | .095 |
|       | TINNOfa    | .162                        | .118       | .090                      |  | 1.372  | .172 |
|       | TEOPROfa   | .786                        | .120       | .445                      |  | 6.558  | .000 |
|       | TRTfa      | .130                        | .110       | .080                      |  | 1.183  | .238 |
| 2     | (Constant) | 5.238                       | 2.700      |                           |  | 1.940  | .054 |
|       | TEBfa      | .139                        | .080       | .110                      |  | 1.730  | .085 |
|       | TINNOfa    | .146                        | .118       | .081                      |  | 1.238  | .217 |
|       | TEOPROfa   | .791                        | .119       | .448                      |  | 6.641  | .000 |
|       | TRTfa      | .102                        | .110       | .062                      |  | .925   | .356 |
| 3     | (Constant) | -.927                       | 5.409      |                           |  | -.171  | .864 |
|       | TEBfa      | .129                        | .080       | .103                      |  | 1.609  | .109 |
|       | TINNOfa    | .144                        | .117       | .080                      |  | 1.224  | .223 |
|       | TEOPROfa   | .807                        | .119       | .457                      |  | 6.756  | .000 |
|       | TRTfa      | .649                        | .431       | .397                      |  | 1.508  | .133 |
|       | TGAPfa     | .345                        | .210       | .564                      |  | 1.646  | .102 |
|       | Mrt_gap    | -.024                       | .018       | -.600                     |  | -1.314 | .190 |

a. Dependent Variable: TBPfa

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Release 2.16.3 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D. [www.afhayes.com](http://www.afhayes.com)  
Documentation available in Hayes (2013). [www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

\*\*\*\*\*

Model = 1  
Y = TBPfa  
X = TRTfa  
M = TGAPfa

Sample size  
183

\*\*\*\*\*

Outcome: TBPfa

Model Summary

| R     | R-sq  | MSE     | F      | df1    | df2      | p     |
|-------|-------|---------|--------|--------|----------|-------|
| .2599 | .0675 | 12.1704 | 4.3222 | 3.0000 | 179.0000 | .0057 |

Model

|          | coeff   | se     | t      | p     | LLCI   | ULCI    |
|----------|---------|--------|--------|-------|--------|---------|
| constant | 12.9911 | 5.5971 | 2.3210 | .0214 | 1.9463 | 24.0360 |
| TGAPfa   | .2287   | .2360  | .9690  | .3339 | -.2370 | .6944   |
| TRTfa    | .6547   | .4866  | 1.3456 | .1801 | -.3054 | 1.6148  |
| int_1    | -.0135  | .0202  | -.6673 | .5055 | -.0534 | .0264   |

Product terms key:

int\_1 TRTfa X TGAPfa

R-square increase due to interaction(s):

|       | R2-chng | F     | df1    | df2      | p     |
|-------|---------|-------|--------|----------|-------|
| int_1 | .0023   | .4453 | 1.0000 | 179.0000 | .5055 |

\*\*\*\*\*

Conditional effect of X on Y at values of the moderator(s):

| TGAPfa  | Effect | se    | t      | p     | LLCI   | ULCI  |
|---------|--------|-------|--------|-------|--------|-------|
| 17.3933 | .4198  | .1690 | 2.4844 | .0139 | .0864  | .7532 |
| 23.2459 | .3408  | .1193 | 2.8571 | .0048 | .1054  | .5761 |
| 29.0985 | .2617  | .1672 | 1.5654 | .1193 | -.0682 | .5917 |

Values for quantitative moderators are the mean and plus/minus one SD from mean.  
Values for dichotomous moderators are the two values of the moderator.

----- END MATRIX -----

## MODERATOR: ONLINE SOCIAL NETWORKING

### ENTREPRENEURIAL BRICOLAGE – NASCENT VENTURE BUSINESS PERFORMANCE

Model Summary<sup>d</sup>

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1     | .518 <sup>a</sup> | .268     | .252              | 3.09958                    | .268              | 16.295   | 4   | 178 | .000          | 1.861         |
| 2     | .538 <sup>b</sup> | .289     | .269              | 3.06330                    | .021              | 5.240    | 1   | 177 | .023          |               |
| 3     | .538 <sup>c</sup> | .290     | .265              | 3.07090                    | .001              | .126     | 1   | 176 | .723          |               |

a. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa

b. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TOSNfa

c. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TOSNfa, mEB\_osn

d. Dependent Variable: TBPfa

Coefficients<sup>a</sup>

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients |  | t     | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--|-------|------|
|       |            | B                           | Std. Error | Beta                      |  |       |      |
| 1     | (Constant) | 6.596                       | 2.621      |                           |  | 2.517 | .013 |
|       | TEBfa      | .135                        | .081       | .108                      |  | 1.679 | .095 |
|       | TINNOfa    | .162                        | .118       | .090                      |  | 1.372 | .172 |
|       | TEOPROfa   | .786                        | .120       | .445                      |  | 6.558 | .000 |
|       | TRTfa      | .130                        | .110       | .080                      |  | 1.183 | .238 |
| 2     | (Constant) | 1.553                       | 3.400      |                           |  | .457  | .648 |
|       | TEBfa      | .158                        | .080       | .125                      |  | 1.962 | .051 |
|       | TINNOfa    | .187                        | .117       | .104                      |  | 1.591 | .113 |
|       | TEOPROfa   | .757                        | .119       | .429                      |  | 6.351 | .000 |
|       | TRTfa      | .147                        | .109       | .090                      |  | 1.346 | .180 |
| 3     | TOSNfa     | .110                        | .048       | .148                      |  | 2.289 | .023 |
|       | (Constant) | 7.332                       | 16.650     |                           |  | .440  | .660 |
|       | TEBfa      | -.084                       | .685       | -.067                     |  | -.122 | .903 |
|       | TINNOfa    | .182                        | .118       | .101                      |  | 1.544 | .124 |
|       | TEOPROfa   | .758                        | .120       | .430                      |  | 6.344 | .000 |
|       | TRTfa      | .149                        | .110       | .091                      |  | 1.362 | .175 |
|       | TOSNfa     | -.033                       | .407       | -.045                     |  | -.082 | .935 |
|       | mEB_osn    | .006                        | .017       | .257                      |  | .355  | .723 |

a. Dependent Variable: TBPfa

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Release 2.16.3 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D. [www.afhayes.com](http://www.afhayes.com)  
Documentation available in Hayes (2013). [www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

\*\*\*\*\*

Model = 1  
Y = TBPfa  
X = TEBfa  
M = TOSNfa

Sample size  
183

\*\*\*\*\*

Outcome: TBPfa

Model Summary

| R     | R-sq  | MSE     | F      | df1    | df2      | p     |
|-------|-------|---------|--------|--------|----------|-------|
| .2125 | .0452 | 12.4627 | 2.8214 | 3.0000 | 179.0000 | .0403 |

Model

|          | coeff   | se      | t     | p     | LLCI     | ULCI    |
|----------|---------|---------|-------|-------|----------|---------|
| constant | 15.0493 | 18.8649 | .7977 | .4261 | -22.1768 | 52.2755 |
| TOSNfa   | .0635   | .4639   | .1368 | .8913 | -.8520   | .9790   |
| TEBfa    | .0883   | .7821   | .1128 | .9103 | -1.4551  | 1.6316  |
| int_1    | .0025   | .0193   | .1319 | .8952 | -.0355   | .0406   |

Product terms key:

int\_1 TEBfa X TOSNfa

R-square increase due to interaction(s):

|       | R2-chng | F     | df1    | df2      | p     |
|-------|---------|-------|--------|----------|-------|
| int_1 | .0001   | .0174 | 1.0000 | 179.0000 | .8952 |

\*\*\*\*\*

Conditional effect of X on Y at values of the moderator(s):

| TOSNfa  | Effect | se    | t      | p     | LLCI   | ULCI  |
|---------|--------|-------|--------|-------|--------|-------|
| 35.1908 | .1778  | .1344 | 1.3235 | .1874 | -.0873 | .4430 |
| 40.0055 | .1901  | .0924 | 2.0560 | .0412 | .0076  | .3725 |
| 44.8202 | .2023  | .1277 | 1.5846 | .1148 | -.0496 | .4543 |

Values for quantitative moderators are the mean and plus/minus one SD from mean.  
Values for dichotomous moderators are the two values of the moderator.

----- END MATRIX -----

# INNOVATIVENESS (ENTREPRENEURIAL ORIENTATION) – NASCENT VENTURE BUSINESS PERFORMANCE

Model Summary<sup>d</sup>

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1     | .518 <sup>a</sup> | .268     | .252              | 3.09958                    | .268              | 16.295   | 4   | 178 | .000          | 1.861         |
| 2     | .538 <sup>b</sup> | .289     | .269              | 3.06330                    | .021              | 5.240    | 1   | 177 | .023          |               |
| 3     | .538 <sup>c</sup> | .289     | .265              | 3.07171                    | .000              | .033     | 1   | 176 | .856          |               |

a. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa

b. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TOSNfa

c. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TOSNfa, minno\_osn

d. Dependent Variable: TBPfa

Coefficients<sup>a</sup>

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients |  | t     | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--|-------|------|
|       |            | B                           | Std. Error | Beta                      |  |       |      |
| 1     | (Constant) | 6.596                       | 2.621      |                           |  | 2.517 | .013 |
|       | TEBfa      | .135                        | .081       | .108                      |  | 1.679 | .095 |
|       | TINNOfa    | .162                        | .118       | .090                      |  | 1.372 | .172 |
|       | TEOPROfa   | .786                        | .120       | .445                      |  | 6.558 | .000 |
|       | TRTfa      | .130                        | .110       | .080                      |  | 1.183 | .238 |
| 2     | (Constant) | 1.553                       | 3.400      |                           |  | .457  | .648 |
|       | TEBfa      | .158                        | .080       | .125                      |  | 1.962 | .051 |
|       | TINNOfa    | .187                        | .117       | .104                      |  | 1.591 | .113 |
|       | TEOPROfa   | .757                        | .119       | .429                      |  | 6.351 | .000 |
|       | TRTfa      | .147                        | .109       | .090                      |  | 1.346 | .180 |
| 3     | TOSNfa     | .110                        | .048       | .148                      |  | 2.289 | .023 |
|       | (Constant) | -.546                       | 12.053     |                           |  | -.045 | .964 |
|       | TEBfa      | .159                        | .081       | .127                      |  | 1.965 | .051 |
|       | TINNOfa    | .375                        | 1.044      | .208                      |  | .359  | .720 |
|       | TEOPROfa   | .755                        | .120       | .428                      |  | 6.287 | .000 |
|       | TRTfa      | .147                        | .109       | .090                      |  | 1.347 | .180 |
|       | TOSNfa     | .162                        | .292       | .218                      |  | .554  | .580 |
|       | minno_osn  | -.005                       | .026       | -.122                     |  | -.182 | .856 |

a. Dependent Variable: TBPfa

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Release 2.16.3 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D. [www.afhayes.com](http://www.afhayes.com)  
Documentation available in Hayes (2013). [www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

\*\*\*\*\*

Model = 1  
Y = TBPfa  
X = TINNOfa  
M = TOSNfa

Sample size  
183

\*\*\*\*\*

Outcome: TBPfa

Model Summary

| R     | R-sq  | MSE     | F      | df1    | df2      | p     |
|-------|-------|---------|--------|--------|----------|-------|
| .2526 | .0638 | 12.2190 | 4.0677 | 3.0000 | 179.0000 | .0080 |

Model

|          | coeff  | se      | t      | p     | LLCI     | ULCI    |
|----------|--------|---------|--------|-------|----------|---------|
| constant | 6.8934 | 13.1474 | .5243  | .6007 | -19.0504 | 32.8372 |
| TOSNfa   | .2826  | .3287   | .8596  | .3911 | -.3661   | .9313   |
| TINNOfa  | .9365  | 1.1754  | .7968  | .4266 | -1.3829  | 3.2559  |
| int_1    | -.0145 | .0295   | -.4917 | .6235 | -.0727   | .0437   |

Product terms key:

int\_1 TINNOfa X TOSNfa

R-square increase due to interaction(s):

|       | R2-chng | F     | df1    | df2      | p     |
|-------|---------|-------|--------|----------|-------|
| int_1 | .0013   | .2418 | 1.0000 | 179.0000 | .6235 |

\*\*\*\*\*

Conditional effect of X on Y at values of the moderator(s):

| TOSNfa  | Effect | se    | t      | p     | LLCI   | ULCI  |
|---------|--------|-------|--------|-------|--------|-------|
| 35.1908 | .4262  | .1844 | 2.3108 | .0220 | .0623  | .7902 |
| 40.0055 | .3564  | .1311 | 2.7195 | .0072 | .0978  | .6150 |
| 44.8202 | .2866  | .2016 | 1.4213 | .1570 | -.1113 | .6844 |

Values for quantitative moderators are the mean and plus/minus one SD from mean.  
Values for dichotomous moderators are the two values of the moderator.

----- END MATRIX -----

# PROACTIVENESS (ENTREPRENEURIAL ORIENTATION) – NASCENT VENTURE BUSINESS PERFORMANCE

Model Summary<sup>d</sup>

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1     | .518 <sup>a</sup> | .268     | .252              | 3.09958                    | .268              | 16.295   | 4   | 178 | .000          | 1.850         |
| 2     | .538 <sup>b</sup> | .289     | .269              | 3.06330                    | .021              | 5.240    | 1   | 177 | .023          |               |
| 3     | .546 <sup>c</sup> | .298     | .274              | 3.05274                    | .009              | 2.227    | 1   | 176 | .137          |               |

a. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa

b. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TOSNfa

c. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TOSNfa, mpro\_osn

d. Dependent Variable: TBPfa

Coefficients<sup>a</sup>

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients |  | t      | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--|--------|------|
|       |            | B                           | Std. Error | Beta                      |  |        |      |
| 1     | (Constant) | 6.596                       | 2.621      |                           |  | 2.517  | .013 |
|       | TEBfa      | .135                        | .081       | .108                      |  | 1.679  | .095 |
|       | TINNOfa    | .162                        | .118       | .090                      |  | 1.372  | .172 |
|       | TEOPROfa   | .786                        | .120       | .445                      |  | 6.558  | .000 |
|       | TRTfa      | .130                        | .110       | .080                      |  | 1.183  | .238 |
| 2     | (Constant) | 1.553                       | 3.400      |                           |  | .457   | .648 |
|       | TEBfa      | .158                        | .080       | .125                      |  | 1.962  | .051 |
|       | TINNOfa    | .187                        | .117       | .104                      |  | 1.591  | .113 |
|       | TEOPROfa   | .757                        | .119       | .429                      |  | 6.351  | .000 |
|       | TRTfa      | .147                        | .109       | .090                      |  | 1.346  | .180 |
| 3     | TOSNfa     | .110                        | .048       | .148                      |  | 2.289  | .023 |
|       | (Constant) | 18.264                      | 11.698     |                           |  | 1.561  | .120 |
|       | TEBfa      | .161                        | .080       | .128                      |  | 2.015  | .045 |
|       | TINNOfa    | .199                        | .117       | .110                      |  | 1.695  | .092 |
|       | TEOPROfa   | -.720                       | .997       | -.408                     |  | -.722  | .471 |
|       | TRTfa      | .149                        | .109       | .091                      |  | 1.373  | .171 |
|       | TOSNfa     | -.322                       | .293       | -.432                     |  | -1.098 | .274 |
|       | mpro_osn   | .038                        | .025       | 1.054                     |  | 1.492  | .137 |

a. Dependent Variable: TBPfa

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Release 2.16.3 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D. [www.afhayes.com](http://www.afhayes.com)  
Documentation available in Hayes (2013). [www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

\*\*\*\*\*

Model = 1  
Y = TBPfa  
X = TEOPROfa  
M = TOSNfa

Sample size  
183

\*\*\*\*\*

Outcome: TBPfa

Model Summary

|   | R     | R-sq  | MSE    | F       | df1    | df2      |
|---|-------|-------|--------|---------|--------|----------|
| p | .5113 | .2614 | 9.6405 | 21.1146 | 3.0000 | 179.0000 |
|   | .0000 |       |        |         |        |          |

Model

|          | coeff   | se      | t      | p     | LLCI    | ULCI    |
|----------|---------|---------|--------|-------|---------|---------|
| constant | 23.4648 | 11.7376 | 1.9991 | .0471 | .3029   | 46.6267 |
| TOSNfa   | -.2855  | .2977   | -.9593 | .3387 | -.8729  | .3018   |
| TEOPROfa | -.4141  | 1.0075  | -.4110 | .6815 | -2.4022 | 1.5740  |
| int_1    | .0323   | .0255   | 1.2659 | .2072 | -.0180  | .0826   |

Product terms key:

int\_1 TEOPROfa X TOSNfa

R-square increase due to interaction(s):

|       | R2-chng | F      | df1    | df2      | p     |
|-------|---------|--------|--------|----------|-------|
| int_1 | .0066   | 1.6025 | 1.0000 | 179.0000 | .2072 |

\*\*\*\*\*

Conditional effect of X on Y at values of the moderator(s):

| TOSNfa  | Effect | se    | t      | p     | LLCI  | ULCI   |
|---------|--------|-------|--------|-------|-------|--------|
| 35.1908 | .7217  | .1540 | 4.6871 | .0000 | .4178 | 1.0255 |
| 40.0055 | .8771  | .1152 | 7.6117 | .0000 | .6497 | 1.1044 |
| 44.8202 | 1.0325 | .1816 | 5.6848 | .0000 | .6741 | 1.3908 |

Values for quantitative moderators are the mean and plus/minus one SD from mean.

Values for dichotomous moderators are the two values of the moderator.

----- END MATRIX -----



# **RISKINESS (ENTREPRENEURIAL ORIENTATION) – NASCENT VENTURE BUSINESS PERFORMANCE**

**Model Summary<sup>d</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1     | .518 <sup>a</sup> | .268     | .252              | 3.09958                    | .268              | 16.295   | 4   | 178 | .000          | 1.868         |
| 2     | .538 <sup>b</sup> | .289     | .269              | 3.06330                    | .021              | 5.240    | 1   | 177 | .023          |               |
| 3     | .541 <sup>c</sup> | .292     | .268              | 3.06476                    | .003              | .832     | 1   | 176 | .363          |               |

a. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa

b. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TOSNfa

c. Predictors: (Constant), TRTfa, TEBfa, TINNOfa, TEOPROfa, TOSNfa, mrt\_osn

d. Dependent Variable: TBPfa

**Coefficients<sup>a</sup>**

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients |  | t     | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--|-------|------|
|       |            | B                           | Std. Error | Beta                      |  |       |      |
| 1     | (Constant) | 6.596                       | 2.621      |                           |  | 2.517 | .013 |
|       | TEBfa      | .135                        | .081       | .108                      |  | 1.679 | .095 |
|       | TINNOfa    | .162                        | .118       | .090                      |  | 1.372 | .172 |
|       | TEOPROfa   | .786                        | .120       | .445                      |  | 6.558 | .000 |
|       | TRTfa      | .130                        | .110       | .080                      |  | 1.183 | .238 |
| 2     | (Constant) | 1.553                       | 3.400      |                           |  | .457  | .648 |
|       | TEBfa      | .158                        | .080       | .125                      |  | 1.962 | .051 |
|       | TINNOfa    | .187                        | .117       | .104                      |  | 1.591 | .113 |
|       | TEOPROfa   | .757                        | .119       | .429                      |  | 6.351 | .000 |
|       | TRTfa      | .147                        | .109       | .090                      |  | 1.346 | .180 |
|       | TOSNfa     | .110                        | .048       | .148                      |  | 2.289 | .023 |
| 3     | (Constant) | 10.628                      | 10.513     |                           |  | 1.011 | .313 |
|       | TEBfa      | .163                        | .081       | .130                      |  | 2.021 | .045 |
|       | TINNOfa    | .188                        | .117       | .104                      |  | 1.601 | .111 |
|       | TEOPROfa   | .765                        | .120       | .433                      |  | 6.397 | .000 |
|       | TRTfa      | -.691                       | .925       | -.423                     |  | -.747 | .456 |
|       | TOSNfa     | -.121                       | .257       | -.162                     |  | -.469 | .640 |
|       | mrt_osn    | .021                        | .023       | .586                      |  | .912  | .363 |

a. Dependent Variable: TBPfa

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Release 2.16.3 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D. [www.afhayes.com](http://www.afhayes.com)  
Documentation available in Hayes (2013). [www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

\*\*\*\*\*

Model = 1  
Y = TBPfa  
X = TRTfa  
M = TOSNfa

Sample size  
183

\*\*\*\*\*

Outcome: TBPfa

Model Summary

| R     | R-sq  | MSE     | F      | df1    | df2      | p     |
|-------|-------|---------|--------|--------|----------|-------|
| .2780 | .0773 | 12.0435 | 4.9964 | 3.0000 | 179.0000 | .0024 |

Model

|          | coeff   | se      | t      | p     | LLCI    | ULCI    |
|----------|---------|---------|--------|-------|---------|---------|
| constant | 15.2880 | 11.7443 | 1.3017 | .1947 | -7.8872 | 38.4632 |
| TOSNfa   | .0632   | .2894   | .2185  | .8273 | -.5079  | .6344   |
| TRTfa    | .1754   | 1.0382  | .1689  | .8661 | -1.8733 | 2.2240  |
| int_1    | .0052   | .0257   | .2014  | .8406 | -.0455  | .0558   |

Product terms key:

int\_1 TRTfa X TOSNfa

R-square increase due to interaction(s):

|       | R2-chng | F     | df1    | df2      | p     |
|-------|---------|-------|--------|----------|-------|
| int_1 | .0002   | .0405 | 1.0000 | 179.0000 | .8406 |

\*\*\*\*\*

Conditional effect of X on Y at values of the moderator(s):

| TOSNfa  | Effect | se    | t      | p     | LLCI  | ULCI  |
|---------|--------|-------|--------|-------|-------|-------|
| 35.1908 | .3571  | .1744 | 2.0475 | .0421 | .0129 | .7013 |
| 40.0055 | .3820  | .1177 | 3.2466 | .0014 | .1498 | .6142 |
| 44.8202 | .4069  | .1666 | 2.4416 | .0156 | .0780 | .7357 |

Values for quantitative moderators are the mean and plus/minus one SD from mean.  
Values for dichotomous moderators are the two values of the moderator.

----- END MATRIX -----